WILLIAMS & SINGH, LLP
ATTORNEYS AT LAW

DREW D. WILLIAMS
RAJ P. SINGH

1122 State St., Ste. F
El Centro, CA 92243
Tel. 760.994.4992
Fax 760.589.1006
www.williamsandsingh.com

October 1, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OCT 07 2019

Christopher Hazeltine
City Manager
City of Poway
13325 Civic Center Drive
Poway, California 92064

Re: Updated Notice of Violations and Intent to Sue under the Clean Water Act, 33 U.S.C. § 1251 et seq.

Through counsel, Poway landowner [redacted][1] notifies you of his intent to update his citizen lawsuit against the City of Poway with additional claims in an amended complaint setting out claims based on facts that occurred both before and after the original pleadings were filed on November 15, 2018 (18cv2615 JLS (AHG)) and on September 18, 2019 (19cv1803 JLS (AHG)) over ongoing violations of the Clean Water Act (CWA) and the San Diego Regional MS4 Permit, Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100 (2013 MS4 Permit). The City of Poway is the operator of Lake Poway and the Lake Poway Recreation Area which includes the City-owned MS4 which receives discharges of stormwater, non-storm spring waters, rising groundwaters, and unpermitted dredged and fill materials from the City's activities as well from residents of Warren Canyon upstream of Lake Poway under the City of Poway's jurisdiction. The City of Poway is ultimately responsible for all of these stormwater and non-storm water discharges into and from its MS4 and into receiving waters including Warren Canyon, Warren Creek, and Lake Poway which all have been deemed "Waters of the United States" by the EPA and the State of California. According to the terms of the 2013 MS4 Permit, the City of Poway is also responsible for addressing the recurring exceedances of the non-stormwater action levels (NALs) for phosphorous, indicator bacteria, iron, and nitrogen that are being discharged into its MS4 and into Lake Poway on a daily basis during the times of the year when there is stream flow through Warren Canyon. In 2019, Warren Creek at the Boulder Bay area of Lake Poway has had consistent stream flow since February 5, 2019, 24 hours a day, 7 days

[1] [redacted] owns the following parcels in the City of Poway: APNs 278-210-1800; 278-210-0400; 278-210-0300; 278-210-2900; and 278-210-3000. These parcels are all within the subwatershed area feeding Lake Poway. His mailing address is [redacted].

a week, persisting through at least August 10, 2019. In 2019, stream flow through Warren Crossing, located at 33.0030 latitude, -117.0057 longitude, was persistent 24 hours a day, 7 days a week from February 5, 2019 through at least June 5, 2019. After June 5, 2019, water flow through Warren Crossing became more intermittent at the surface at this location along Warren Creek and had surface water flows at least during the night and morning hours daily there through at least the end of June 2019. For those times that surface flow was not present, water flowed underground near the surface and reemerged as a continuous, persistent visible stream immediately above the Boulder Bay area of Lake Poway through at least August 10, 2019.[2]

In the City of Poway, anthropogenic sources of pollutants—namely unpermitted discharges of dredged and fill materials placed around culverts and other conveyances including constructed fords installed by the City and/or by private third parties in Warren Canyon and unpermitted hydromodification of Warren Creek, including wetlands vegetation removal, throughout Warren Canyon caused by humans – have become mobilized and discharged into the mouth and other portions of Warren Creek and into Lake Poway as an unreasonable amount of waste from and through Poway's point sources in violation of its 2013 MS4 Permit. The approximate location of the washed-out, unpermitted point-source culverts and other conveyances[3] including washed-out constructed fords as a result of the February 2017 and February 2019 winter storms (February 27-28, 2017 and February 14-16, 2019 more specifically) in Warren Canyon are as follows:

a. 33.001298, -117.003004 (APN: 278-290-1100);
b. 32.998925, -116.998575 (APN: 278-300-5000);
c. 32.998802, -116.997127 (APN: 278-300-5900);
d. 33.001296, -117.003004 (APN: 278-290-0600);
e. 32.9990, -116.9961 (APN: 278-200-1900);
f. 32.9992, -116.9934 and 32.9993, -116.9927 (APN: 278-200-0700);
g. 32.998671, -116.981069 (APN: 278-200-0200);
h. 32.998204, -116.977989 (APN: 278-210-1500);
i. 32.9980, -116.9761 (APN: 278-210-1800);
j. 32.9990, -116.9756 (APN: 278-210-1800);
k. 32.998103, -116.976631 (APN: 278-210-1600);
l. 32.9992, -117.0003 (APN: 278-300-6000); and
m. 33.0030, -117.0057 (APN: 278-280-2300).

These unpermitted discharges have caused and are causing and are threatening to cause a condition of pollution in Lake Poway. Septic tanks are located in proximity to many of these conveyances listed above (a through m) in Warren Canyon, have not been documented and monitored by the City of Poway as required by the 2013 MS4 Permit, and have contributed to

---

[2] In the winter, spring, and summer of 2019, Kelly Spring, located at 32.9998 Latitude, -116.9749 Longitude, continually fed Lake Poway via Warren Creek through Warren Canyon as a visible stream of surface water from February 5, 2019 to at least July 15, 2019. In the winter and spring of 2017, Kelly Spring on Mount Woodson continually fed Lake Poway from February 27, 2017 through at least April 16, 2017.

[3] Neither the City of Poway nor the residents of Warren Canyon procured valid Clean Water Act permits for the stream crossings from the Department of the Army or the San Diego Water Board during the past 30 years.

some of the recurring pollutants downstream into Poway's MS4.[4] The man-made conveyances in Warren Canyon listed above were mostly washed out on (or around) February 27-28, 2017 and again on (or around) February 14-16, 2019. However, residual waste continued to be washed down into Lake Poway before and after those dates via stormwater and non-stormwater. The pollution is ongoing because the waste remains in the mouth and other portions of the creek and has become further and further discharged into the reservoir with each passing year and each large storm event and because waste – i.e. unauthorized discharges such as unpermitted dredged and fill and earth eroded from tractors – has been subsequently added to Warren Creek by the City and by other Poway residents of Warren Canyon after the winter storms of 2017 and 2019 without the proper permits. The following parcels have unpermitted rebuilt crossings constructed after the winter 2017 storms: APNs: 278-200-0700; 278-200-1900; 278-280-2300;[5] 278-290-1100; 278-300-5900; 278-290-0600; 278-210-1500; 278-300-6000; 278-200-0200; 278-300-5000; 278-280-2300; and APN: 278-210-1600.

Lake Poway is being affected by waste to the extent that the reservoir is regularly losing its storage capacity, even more dramatically as shown after the February 14-16, 2019 winter storms (see May 24, 2019 Notice of Violations (NOV) Letter, Exhibit 2), and recreational activities such as fishing are being impaired because of deleterious deposits removing fishing spots and causing turbidity, eutrophication, and coloration of the waters from iron, nitrogen, and phosphorous-rich water and sediment. The effects of these discharges are the overabundance of harmful cyanobacteria and other algal blooms occurring in Lake Poway affecting aquatic health and recreation including boating, fishing, and nearshore aesthetic enjoyment, the exceedances of indicator bacteria such as *Enterococci sp.* harming REC-1 beneficial uses such as fishing, the closure of certain portions of Lake Poway including at Hidden Bay due to swamp-like conditions, the use of toxic copper-based algaecides near Boulder Bay and Hidden Bay to combat eutrophication, and the forced reduction of the water levels and the storage capacity of Lake Poway due to the waste blockage and resulting effects. In its JRMP, the City has adopted the BMPs #1 and #14 and has committed to remove waste deposits and eroded soils (abatement) from illegal connections in its MS4 that are causing or threatening to cause a condition of pollution in receiving waters. However, the City of Poway continues to refuse to remove these waste deposits throughout Warren Canyon including at Warren Crossing and at the mouth of Warren Creek at the Boulder Bay area of Lake Poway.

The City of Poway has identified in the public record that spring water flows in its MS4 and

---

[4] In addition to the parcels listed above (subpoints a through m), the following parcel contains a septic system that has not been documented and monitored by the City of Poway: APN: 278-210-2400.

[5] Arguably, the requirements for Priority Development Projects of Provision E.3.b. of the 2013 MS4 Permit were triggered by the rebuilding projects in Warren Canyon including on City property for the following reasons: the area affected by the rebuilding projects, including at Warren Crossing and at the Lake Poway boat dock replacement project in 2017 as well as the area affected by the reduced reservoir levels in 2017, totals more than one acre. See Provision E.3.b(1)(f). The City of Poway has not fulfilled the requirements for Priority Development Projects under Provision E.3.b. in Warren Canyon in 2017 with all of the rebuilding activity in Warren Canyon in 2017, including those unpermitted projects on private property, which also cover more than one acre of rebuilding and also triggered the requirements of Provision E.3.b.

reaches Lake Poway, and Poway's JRMP has identified the following pollutants coming from its MS4 in Warren Canyon: Indicator Bacteria, Color, Manganese, Mercury, Nitrogen, pH, Phosphorous, Viruses, Turbidity, and Nutrients. The non-storm spring water discharges of pollutants into Lake Poway have recurred seasonally because waste from washed-out unpermitted crossings and other wetland destruction activity remains in the creek/MS4 and because non-storm spring water assimilates pollutants from various unpermitted (and illicit) point-sources in Warren Canyon including stream crossings and leaking septic tanks, leading to the non-storm water discharge of sediment and other pollutants into Lake Poway. Discharges of non-storm spring water directly from Rock Haven (Rock Haven Spring), and from Mount Woodson (Kelly Spring, located at 32.9998 Latitude, -116.9749 Longitude) into the City of Poway's MS4 and into Lake Poway are also themselves sources of soluble phosphorous, nitrogen, and iron pollutants aggravating a condition of pollution in Lake Poway as described above. Because Warren Canyon and Lake Poway are City-designated Environmentally Sensitive Areas and because these areas are being fed with non-storm water discharges containing pollutants exceeding non-storm water action levels (NALs) as set forth in the 2013 MS4 Permit, Provision C, on a regular basis during the winter and spring months of non-drought years as shown in the exhibits attached to the May 24, 2019 NOV and in Exhibit 11 attached to this letter, the City of Poway must address these flows as a priority concern as required by Provisions B.5 and E.2.d and must use the resources that it most definitely has to reduce these flows as required by Provision E.2.a.(6) and (7) as well as the City of Poway's JRMP (BMP #11). The City of Poway, though inadvertently identifying that groundwater containing pollutants comes from Warren Canyon into its MS4, has not minimized the polluted spring water before it flows into its MS4 by undertaking feasible projects such as constructing water-trapping weirs and repairing wetlands damaged by humans upstream of the lake. If Poway chooses not to address the non-storm spring waters that are contributing pollutants to Lake Poway as required by the 2013 MS4 Permit, the City must then obtain a separate NPDES permit for the discharges.

Provision E.2.d describes the measures that the City must take to investigate and eliminate illicit discharges to the MS4. Provision E.2.d.(1) requires the City to "prioritize and determine when follow-up investigations will be performed in response to visual observations . . . of a detected non-storm water **or** illicit discharge to or from the MS4 . . . causing or contributing, or threatening to cause or contribute to impairments in water bodies . . . in environmentally sensitive areas (ESAs)" and for "[p]ollutants identified as causing or contributing to an exceedance of a NAL." 2013 MS4 Permit, Provisions E.2.d.(1), E.2.d.(1)(b), and E.2.d.(1)(d). Poway has not adequately responded to Plaintiff's May 24, 2019 NOV documenting non-storm water and illicit discharges in Warren Canyon and Lake Poway, city designated ESAs, and it must respond to the reports of illicit connections in Warren Canyon including from unpermitted stream crossings and from undocumented and unmonitored septic tanks as addressed in this letter. Under Provisions E.2.d.(2) and E.2.d.(3), the City is also required to respond to a citizen's reports of non-storm water flows within Warren Canyon and the resulting polluted non-storm water discharges into Lake Poway with its own investigation and must maintain records of the discharges and their sources and the methods used to control them. The City has failed to do so. Finally, under Provision E.2.d.(4), each Copermittee must submit a summary of all detected non-storm water discharges with each WQIP annual report required by Provision F. The City continues to fail to do so in an accurate and thorough fashion for years 2017, 2018, and 2019.

The pollutants present in the spring water from Kelly Spring and from Rock Haven Spring, including the assimilated sediment pollutants from unpermitted culvert crossings, unpermitted

wetlands damage in Warren Canyon from tractors (anthropogenically influenced sources), and failing septic tanks, have been added to Lake Poway through a point source (including through Warren Crossing and through Fisherman's Footbridge located at 33.0039 Latitude, -117.007 Longitude) and have aggravated a condition of eutrophication pollution, waste blockage pollution, and harmful bacterial loads in the reservoir. Even if no one from the City has never explicitly identified the spring water as a source of pollutants through its MS4 in Warren Canyon, the 2013 MS4 Permit still requires the City to reduce or eliminate non-storm water discharges such as water from springs to the MS4, where feasible and when priorities and resources allow, unless the City obtains a separate NPDES permit for the non-storm water discharges. 2013 MS4 Permit, Provision E.2.a.(7). In other words, there is no requirement in Provision E.2.a.(7) of the 2013 MS4 Permit that the City or the San Diego Water Board specifically identify the spring water as "a source of pollutants to receiving waters;" if a citizen can prove that the City has failed to implement the various requirements of Provision E.2.d of its 2013 MS4 Permit that would have uncovered the pollutants in the spring water or has failed to respond to valid reports of non-storm water containing pollutants through its MS4, he can in turn seek the enforcement of Provision E.2.a.(7) through a citizen enforcement action. Here, the spring water with assimilated pollutants can feasibly be reduced before it enters the City's MS4 through wetland repair projects in Warren Canyon; the City of Poway has the resources to put the plans into place; and the non-storm water discharges into Lake Poway must be addressed as a "priority" as that term is defined in the 2013 MS4 Permit, including Provisions E.2.d. Even though the City of Poway has not yet included the discharges from Warren Canyon into Lake Poway as an area of priority concern in its current WQIP, Poway would have identified the persistent dry weather flows in Warren Canyon – the non-storm spring water discharges – as a "source of pollutants to receiving waters" and as a priority had it been adhering to the requirements of Provision E.2.d and other sections of the 2013 MS4 Permit. Poway's discharges (including the discharges of third parties within and under its jurisdiction) that are causing a condition of pollution in Lake Poway are inherently in violation of the waste discharge prohibitions incorporated in the San Diego Water Board's Basin Plan in violation of Provision A.1.c. These MS4 discharges have contributed to a violation of water quality standards for sediment, phosphorous, iron, total nitrogen, and indicator bacteria, including those in the Basin Plan. 2013 Permit, Provision A.2.a. and A.2.a.(1). The City of Poway must comply with the discharge prohibitions in its 2013 MS4 Permit, Provision A.1.a at a minimum because the polluted water contained a large amount of non-storm spring water that is traceable to Rock Haven Spring and to the seasonal springs on Mount Woodson including Kelly Spring. As a result of its control of land areas that are generating polluted stormwater and non-stormwater, the City of Poway has caused and contributed to, and is causing, contributing to, and threatening to cause, pollution in the wetlands and other waters of Warren Canyon and into Lake Poway, which are all considered waters of the United States.

The City has failed to identify the location and the health of septic tanks throughout Warren Canyon within City limits in 2017, 2018, and 2019. Septic tanks are located in proximity to several of the aforementioned point sources in Warren Canyon. At least one these septic tanks was failing in 2019 and contributed some of the nutrient and bacterial pollutants at Warren Crossing and into Lake Poway. Each Copermittee is responsible for prioritizing its efforts to eliminate non-storm water and illicit discharges or connections to its MS4 based on field screening and monitoring data including satellite imagery, the non-storm water action levels (NALs) of Provision C to support the detection and elimination of non-storm water and illicit discharges to the MS4, required pursuant to Provision E.2, and illicit discharge investigation records collected from septic tank monitoring and monitoring of unpermitted structures such as stream crossings.

Sources of non-storm water and illicit discharges or connections must be eliminated by enforcing the legal authority established by each Copermittee pursuant to Provision E.1 and by reducing non-storm water flows containing pollutants as mandated by Provision E.2.a and Poway's JRMP. Each Copermittee must implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4. 2013 MS4 Permit, Provision E.2.b.(5). Poway continues to refuse to protect its watershed feeding its reservoir by failing to implement Provision E.2.b.(5) with regard to Warren Canyon and the dozen of septic tanks installed throughout the canyon. The City's legal authority must also control the discharge of spills, dumping, or disposal of materials and other unpermitted fills and mobile pollutants into its MS4 in the interconnected privately owned storm water conveyance system within its jurisdiction and parts controlled by other entities such as Caltrans. 2013 MS4 Permit, Provisions E.1.a.(1-10) and E.2.d.(3)(c). Poway fails to fulfill these requirements and protect its own watershed into Lake Poway.

As Poway has not used the "Prohibitions and Limitations Compliance Option" as outlined in Provision B.3.c.(1) and (2) with respect to its stormwater and non-stormwater discharges of polluted sediment and spring water flows containing pollutants such as phosphorous, iron, indicator bacteria, and nitrogen that are aggravating a condition of pollution in receiving waters in the SDR watershed (no numeric goals were set for any of these constituents and there was no public participation process addressing the "option"), Poway is liable under Provision A and must implement Provisions A.4 and E.2 and properly address the flows containing pollutants from Kelly Spring and Rock Haven Spring together with the unpermitted waste deposits from washed-out stream crossings into its MS4. The original 2013 MS4 Permit did not include a "Prohibitions and Limitations Compliance Option" as a way to be deemed in compliance with the discharge prohibitions of Provision A. The optional "Prohibitions and Limitations Compliance Option" as described in Provision B.3.c.(1) and (2) was added to the 2013 MS4 Permit by R9-2015-01 00, which became effective on January 7, 2016. Poway's current non-optional Water Quality Improvement Plan was presented to the San Diego Water Board in September of 2015 which was before the existence of the "Prohibitions and Limitations Compliance Option" and its rigorous requirements including public participation as required by Provision B.3.c.(1)(b)(ii). Poway's current non-optional WQIP cannot satisfy Provision B.3.c. as a matter of law, and Poway must undergo the rigorous process described in Provision B.3.c. in the future if it desires to utilize the "Prohibitions and Limitations Compliance Option."[6]

SPECIFIC EXCEEDANCES

Certified hydrogeologist [redacted] (California Professional Geologist #3713 and California Certified Hydrogeologist #90), who was employed by the County of San Diego for over 20 years as its groundwater expert and CEQA regulatory manager, has conducted water quantity and water quality monitoring of Kelly Spring and Rock Haven Spring using EPA protocols to establish that Warren Creek is a seasonal, intermittent stream fed by persistent groundwater flows and to identify any pollutants from these water sources that are transported to receiving waters of the United States. [redacted] has conducted 24-hour dry weather monitoring of the spring water flows on April 13-14, 2019 to capture the varying flow rates from Kelly Spring and Rock Haven

[6] In contrast, the San Juan Watershed Management Area Plan approved on June 18, 2018 by the San Diego Water Board does specifically utilize and describe the "Prohibitions and Limitations Compliance Option" of Provision B.3.c, and this process has been documented and approved by the San Diego Water Board in its acceptance letter.

Spring and to obtain flow-weighted composite samples for water quality monitoring pursuant to the strictures of Provision D of the 2013 MS4 Permit. John Peterson also conducted dry weather, dry season monitoring of the spring water flows into Lake Poway on June 4, 2019. The results have demonstrated that the water from Kelly Spring (N-Kelly) contains iron and phosphorous pollutants that exceed the NALs established in the City of Poway's JRMP, the 2013 MS4 Permit, and the San Diego Basin Plan, on April 13-14, 2019 and on June 4, 2019. The results also demonstrated that the water from Rock Haven Spring (S-Rock) contains total nitrogen and total phosphorous pollutants that exceed the NALs established by the City of Poway's JRMP, 2013 MS4 Permit, and the San Diego Basin Plan, on April 13-14, 2019. 24-hour water quality monitoring was also conducted in the receiving waters of the United States at Warren Crossing (the City of Poway's MS4) in the damaged wetland and other waters that are directly adjacent to Lake Poway on April 14-15, 2019 according to the strictures of Provision D.1 of the MS4 Permit. The analysis of the flow-weighted composite sample at Warren Crossing has showed that the pollutants from Rock Haven Spring and from Kelly Spring reach the receiving waters of the United States as exceedances of phosphorous and nitrogen NALs are exhibited there as well on April 14-15, 2019. The overall ratio of total nitrogen to total phosphorous (TN : TP) in the discharges is much lower than permissible, allowing harmful cyanobacteria to flourish and a condition of eutrophication to persist in Lake Poway, including on April 14-15, 2019 and in the spring of 2019. Man-caused wetlands destruction in Warren Canyon including in the area surrounding Kelly Spring has resulted in increased pollutant loads downstream and into the reservoir. Water quality monitoring conducted on March 18, 2019, March 21, 2019, March 28, 2019, April 2, 2019, April 10, 2019, May 4-5, 2019 (dry weather monitoring during the dry season), May 30-31, 2019 (dry weather monitoring during the dry season), and June 4, 2019 (dry weather monitoring during the dry season) also confirm that phosphorous levels exceeding NALs from Kelly Spring flow through Warren Crossing and Fisherman's Footbridge and enter Lake Poway on a persistent basis during the winter and spring months when stream waters flow through Warren Canyon during typical non-drought years. Furthermore, the results from the toxicity tests confirm that the nutrient-rich spring waters contribute to the overabundance of algae as compared to the controls in the studies (both the controls and the samples were supplied with nutrients during the experiments; the additional nutrients present in the spring water samples taken on April 15, 2019 and May 5, 2019 resulted in the samples performing better than the controls). Although the subwatershed containing Rock Haven Spring is approximately the same size as the subwatershed area containing Kelly Spring, water flow from Rock Haven Spring occurred over a shorter period of time during the 2019 season, from February 14, 2019 to May 31, 2019, as compared to Kelly Spring. Water from Kelly Spring started flowing on February 5, 2019 and continued to flow through at least July 15, 2019 and into Lake Poway during that time frame.

During major rain events including during the winter and springs months of 2019, stormwater flows freely over exposed materials of the stream crossings and sediment buildup, becoming contaminated with bacteria, color, manganese, iron, mercury, nitrogen, pH, phosphorus, viruses, turbidity, and nutrients at levels above applicable water quality standards for several of these constituents. The polluted water then flows untreated and unfiltered into Lake Poway. For weeks and months in a typical year, non-storm spring water flows freely over exposed materials of the stream crossings and sediment buildup, becoming contaminated with bacteria, color, manganese, iron, mercury, nitrogen, pH, phosphorus, viruses, turbidity, and nutrients at levels above applicable water quality standards for several of these constituents. The contaminated non-storm water then flows untreated into the City's MS4 and into Lake Poway. Specific discharges include:

1. More than 90% of the time when the stream flow through Warren Crossing consisted of dry-weather, non-storm spring water between the months of mid-March, April, May and mid-June 2019, the permitted MS4 contribution of phosphorous into Warren Creek and into Lake Poway (0.1 mg/L maximum daily action level (MDAL) non-storm water action level (NAL)) has been exceeded, oftentimes at levels double the amount allowable under the City's MS4 Permit, Poway's Jurisdictional Runoff Management Plan (JRMP), and the San Diego's Basin Plan.
2. From February 16, 2019 to March 28, 2019, the permitted MS4 contribution of iron into Warren Crossing and into Lake Poway from non-storm water discharges (0.3 mg/L maximum daily action level non-storm action level (NAL)) was exceeded more than 50% of the time. (See Exhibits 6 (May 24, 2019 NOV) and 11 (attached).)
3. The turbidity levels exceeded the storm water action levels (SALs) on February 14 and 15, 2019 at the mouth of Warren Creek at Fisherman's Footbridge.
4. The turbidity levels exceeded the storm water action levels (SALs) on February 27 and 28, 2017 at the mouth of Warren Creek at Fisherman's Footbridge.
5. Total Nitrogen levels of discharges from Warren Crossing into Lake Poway exceeded the NAL as adopted in Poway's JRMP periodically and on at least two occasions between February 5, 2019 and June 5, 2019.
6. Exceeding a NAL as established in the Basin Plan, the 2013 MS4 Permit, and Poway's JRMP is evidence that non-storm water has been anthropogenically influenced.
7. One of the main sources of soluble phosphorous into the City of Poway's MS4 is from Kelly Spring, located at 32.9998 Latitude, -116.9749 Longitude, which is under the City of Poway's jurisdiction and on Plaintiff's property. Total Phosphorus levels from discharges from Kelly Spring exceeded the NAL more than 90% of the time between March 18, 2019 and June 5, 2019.
8. On March 18, 2019, exceedances of the NALs for iron and phosphorous occurred at Warren Crossing.
9. On March 28, 2019, exceedances of the NAL for phosphorous occurred at Fisherman's Footbridge.
10. On April 14-15, 2019, exceedances of the NALs for total phosphorous and total nitrogen occurred at Warren Crossing.
11. On May 4-5, 2019, exceedances of the NALs for total phosphorous and for Enterococcus occurred at Warren Crossing.
12. On May 30-31, 2019, exceedances of the NALs for phosphorous and for Enterococcus occurred at Warren Crossing.
13. On June 4, 2019, exceedances of the NALs for phosphorous and for Enterococcus occurred at Warren Crossing.
14. The location of Rock Haven Spring is part of the public record as it is located in Caltrans' right of way within the City of Poway. The 2013 MS4 Permit mandates that the City of Poway is jointly responsible for discharges from Rock Haven Spring. Provision E.2.b.(6).
15. By June 13, 2019, volume flows from Kelly Spring dropped below 5 gallons per minute and the reduced volume flows resulted in discharges below the NAL for total phosphorous due to biological uptake.
16. Over the last 50 years, including as recently as 2016, the residents of Warren Canyon have altered the wetland system surrounding Kelly Spring, resulting in the reduction of its phosphorous-retention capacity.
17. Other wetland systems in Warren Canyon including on the City owned property surrounding Warren Crossing, located at 33.003 Latitude, -117.006 Longitude, have also lost pollutant-

retention capacity as a direct result of anthropogenic activity.

18. Increased nutrient concentrations – such as nitrogen and phosphorous – in natural water systems, can impact water quality and clarity and contribute to algae blooms that impact native vegetation and interfere with the springs' ecosystems and Lake Poway's ecosystem. Increases in nutrients in Poway's ecosystems and water resources result from a variety of activities, including illegal earth moving activities over the creek, unpermitted dirt-backfilled culverts and/or fords at approximately a dozen locations upstream of Lake Poway, wetlands vegetation removal in the area surrounding Kelly Spring and in the area surrounding Warren Crossing, and failing septic tanks in Warren Canyon.
19. Biological uptake of pollutants such as nitrogen and phosphorous from the spring water in Warren Canyon has been reduced by wetland destruction at specific locations in Warren Canyon, including at Warren Crossing and on APN: 278-210-1800, the parcel containing Kelly Spring.
20. Excessive bacterial and nutrient levels of the spring water discharges as measured at Warren Crossing through the months of February, March, April, May, and June 2019 which exceeded NALs listed in Poway's JRMP indicated that leaking septic tanks in Warren Canyon have contributed to some of the pollution in Lake Poway.
21. On April 15, 2019, the single sample result registered exceedances of the Enterococcus limit (500/100 mL) NAL at Warren Crossing.
22. On May 5, 2019, the single sample result registered exceedances of the Enterococcus limit (240/100 mL) NAL at Warren Crossing.
23. On May 5, 2019, the single sample result registered exceedances of the fecal coliform limit (1600/100 mL) NAL at Warren Crossing.
24. On May 31, 2019, the single sample result registered exceedances of the Enterococcus limit 130/100 mL) NAL at Warren Crossing.
25. On June 4, 2019, during the dry season, the single sample result registered exceedances of the Enterococcus limit (240/100 mL) NAL at Warren Crossing.
26. Exceedances of NALs on various dates in the spring of 2019 in Warren Canyon demonstrate that the various exceedances are not one-time, isolated occurrences; rather exceedances of NALs will recur on a seasonal basis during the winter and spring months of non-drought years in Warren Canyon. Thus, the City of Poway must address the exceedances of the NALs for various constituents through implementing 2013 MS4 Permit, Provision E.2.a.(6) and Poway's JRMP, BMP #11. See Provision E.2.d.(3)(c) of the 2013 MS4 Permit.

PENALTIES AND REMEDIES

Poway has discharged and continues to discharge unreasonable amounts of sedimentation pollution waste (and other assimilated pollutants such as phosphorous in storm water and non-storm water) from its MS4 in a manner that is causing, or threatening to cause, a condition of pollution – i.e. the loss of municipal storage capacity, harm to recreational activities such as fishing and nearshore aesthetic enjoyment, and harm to aquatic species through threatened eutrophication and the toxic effects of copper sulfate – in Warren Canyon and in Lake Poway, a receiving water of the state and WOTUS, in violation of its 2013 MS4 Permit, Provision A.1.a. The violations of the 2013 MS4 Permit's discharge prohibitions continue to this day because the polluted sediment has not been removed, which has lessened the reservoir's storage capacity. The polluted sediment containing phosphorous and nitrates waste is also threatening to cause eutrophication in the Boulder Bay area of Lake Poway in the future. Between February 27, 2017 and April 17, 2017, each day that the City of Poway has caused, contributed to, threatened to

cause, or failed to mitigate polluted stormwater and non-storm water flows through its MS4 is a separate and distinct violation of the 2013 MS4 Permit and 33 U.S.C. §§ 1311(a) and 1342(p) and subject to civil penalties. Between February 5, 2019 and June 5, 2019, each day that the City of Poway has caused, contributed to, threatened to cause, or failed to knowingly mitigate polluted stormwater and non-storm water flows through its MS4 is a separate and distinct violation of the 2013 MS4 Permit and 33 U.S.C. §§ 1311(a) and 1342(p) and subject to civil penalties. In 2017, 2018, and 2019, the City has not properly addressed the non-storm spring water flows that are a source of pollutants to its MS4 above Lake Poway which are aggravating a condition of pollution in Lake Poway. These violations are ongoing and continuous because the City of Poway has not fully enforced the law against private property owners in Warren Canyon who have their own unpermitted discharges of dredge and fill materials in Warren Creek, including maintained, tractor-disturbed crossings in 2017, 2018, and/or 2019. The City of Poway will continue to violate the Clean Water Act in the future unless and until the City is instructed by a federal district judge that the Clean Water Act is applicable to Lake Poway and its watershed area. The City of Poway will continue to violate the Clean Water Act in the future unless and until the City is instructed by a federal district judge to dredge the Boulder Bay area of Lake Poway, remove the waste pollution deposited there, and restore the stream and wetlands there. The City of Poway will continue to violate the Clean Water Act in the future unless and until the City is instructed by a federal district judge to dredge the Warren Crossing area, remove the waste pollution deposited there, and restore and re-establish the wetlands there. The City of Poway will continue to violate the Clean Water Act in the future unless and until the City is instructed by a federal district judge to commence enforcement actions under the Clean Water Act against those in Warren Canyon who have maintained illegal stream crossings over Warren Creek without the proper permits. Unless the City of Poway desists in its violations of the 2013 MS4 Permit and Sections 301(a) and 402(p) of the CWA, 33 U.S.C. §§ 1311(a) and 1342(p), Plaintiff will suffer irreparable harm. From February 27, 2017 to the present, each day that the City has caused, contributed to, or failed to prohibit exceedances of water quality standards by allowing unpermitted waste to remain and accumulate in Warren Canyon and Lake Poway is a separate and distinct violation of the applicable 2013 MS4 Permit and 33 U.S.C. §§ 1311(a) and 1342(p). These violations are ongoing and continuous. In light of the City's history of violations and the nature of the violations, the City will continue to violate these requirements in the future unless and until enjoined from doing so. By committing the acts and omissions alleged above, Defendant City is subject to an assessment of civil penalties for each violation of 33 U.S.C. § 1311(a). See 33 U.S.C. §§ 1319(d), 1365, and 40 C.F.R. § 19.4 (February 6, 2019). An action for injunctive relief under the Clean Water Act is authorized by 33 U.S.C. § 1365(a), and Plaintiff will seek an injunction ordering the City of Poway to cease activities in violation of the Clean Water Act and to undertake activities to remedy the violations.

To remedy the situation and to the improve the water quality of downstream waters including at Warren Crossing and at Lake Poway, surface water expert Tory Walker, P.E. has proposed the wetlands repair projects as described in the May 24, 2019 NOV, Exhibit 7, to address the spring water flows through Warren Canyon by reducing those flows and retaining more of the phosphorous and other pollutants in those flows within engineered wetlands before they enter the City's MS4 at Warren Crossing and into Lake Poway. Minimizing non-storm water flows through wetland repair projects at this location and in other locations in Warren Canyon including at Warren Crossing would lessen the concentration of pollutants in the non-storm water through biological uptake.

CONCLUSIONS

Absent a consent decree approved by the Court and the EPA, Notifier, through counsel, intends, at the close of the sixty (60) day notice period, to amend Plaintiff Kevin T. Kelly's lawsuit or file another citizen lawsuit under Section 505 of the Clean Water Act against the City of Poway, seeking injunctive relief, remedial relief, declaratory relief, and civil penalties for each day of each violation for each U.S. water body over the past five (5) years and sixty (60) days from the date of this notice relating to the illegal discharges through the date of this letter and all violations of Section 301 of the Clean Water Act and violations of the City's 2013 MS4 Permit which occur subsequent to the date of this letter, plus costs, attorney and expert witness fees, and such other relief as may be appropriate. Notifier will also seek removal of the pollutants from waterways as such discharges constitute illegal fill material in violation of Sections 301 and 404 of the Clean Water Act. Notifier intends, at the close of the sixty (60) day notice period, to file a citizen suit under § 505 of the Clean Water Act, 33 U.S.C. §1365, against the City of Poway for the applicable statutory maximum for each violation, presently $54,833 per day for each violation. 33 U.S.C. §1319(d) and 40 C.F.R. §19 and §19.4 Table 1 (or as otherwise provided by federal regulations). Civil penalties are mandatory once violations are found by a federal judge or jury. 33 U.S.C. §1319(c); Leslie Salt Co. v. United States, 55 F.3d 1388, 1396 (9th Cir. 1995) (civil penalties under Clean Water Act are mandatory, not discretionary).

During the sixty (60) day notice period, we will be available to set up a meeting with our team of scientific experts and discuss effective remedies and actions which will assure the Discharger's future compliance with the Clean Water Act and all applicable state water pollution control laws. In addition, we welcome discussion about whatever facts you believe are relevant which are not itemized in this notice letter. If you wish to avail yourself of this opportunity, please contact the undersigned.

Respectfully submitted on October 1, 2019,

Raj P. Singh

Drew D. Williams

RAJ P. SINGH (SBN 269097)
DREW D. WILLIAMS (SBN 277143)
WILLIAMS & SINGH, LLP
1122 W. State Street, Suite E
El Centro, CA 92243
raj@williamsandsingh.com
drew@williamsandsingh.com
Telephone: (760) 994-4992
Facsimile: (760) 589-1006

Attorneys for Kevin T. Kelly

Cc:

Andrew Wheeler
Administrator of the Environmental Protection Agency
Environmental Protection Agency
Mail Code: 1101A
Office of the Administrator
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460
Wheeler.Andrew@epa.gov

Mike Stoker
Regional Administrator of the Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105-
r9.info@epa.gov

Eileen Sobeck, Executive Director
California State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812
Eileen.Sobeck@waterboards.ca.gov

David W. Gibson
Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108
SanDiego@waterboards.ca.gov

Alan B. Fenstermacher
City Attorney, City of Poway
Rutan & Tucker, LLP
611 Anton Boulevard, 14th Floor
Costa Mesa, California 92626

Steve Vaus
Mayor
City of Poway
13325 Civic Center Drive
Poway, California 92064

William Barr
Attorney General of the United States
U.S. Department of Justice
950 Pennsylvania Avenue, N.W.
Washington, DC 20530-0001

UPDATED TABLE OF CONTENTS

EXHIBIT 11 – WATER QUALITY TESTING OF SPRING WATERS AND RECEIVING WATERS IN WARREN CANYON ON MAY 30-31, 2019 (FLOW-WEIGHTED), JUNE 4, 2019, JUNE 14, 2019, FEBRUARY 9, 2019, FEBRUARY 16, 2019, FEBRUARY 18, 2019, FEBRUARY 28, 2019, AND MARCH 11, 2019.

EnviroMatrix Analytical, Inc.

14 June 2019

Personal privacy Ex. (b)(6)
[redacted]

EMA Log #: 19E1059

Project Name: Testing
Project Desc./#: May 31, 2019

Enclosed are the results of analyses for samples received by the laboratory on 05/31/19 13:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19E1059

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N Kelly	19E1059-01	Drinking Water	05/31/19 09:40	05/31/19 13:00
Warren Crossing	19E1059-02	Drinking Water	05/31/19 11:00	05/31/19 13:00

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Total Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N Kelly (19E1059-01) Drinking Water	**Sampled: 05/31/19 09:40**		**Received: 05/31/19 13:00**						
Cadmium	ND	0.001	mg/l	1	9060430	06/04/19	06/05/19	EPA 200.8	
Copper	ND	0.010	"	"	"	"	"	"	
Iron	**0.323**	0.050	"	"	"	"	"	"	
Manganese	**0.005**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Warren Crossing (19E1059-02) Drinking Water	**Sampled: 05/31/19 11:00**		**Received: 05/31/19 13:00**						
Cadmium	ND	0.001	mg/l	1	9060430	06/04/19	06/05/19	EPA 200.8	
Copper	ND	0.010	"	"	"	"	"	"	
Iron	**0.052**	0.050	"	"	"	"	"	"	
Manganese	**0.005**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.027**	0.020	"	"	"	"	"	"	

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19E1059

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N Kelly (19E1059-01) Drinking Water	**Sampled: 05/31/19 09:40**		**Received: 05/31/19 13:00**						
Cadmium	**0.001**	0.001	mg/l	1	9060361	06/03/19	06/03/19	EPA 200.8	
Chromium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.010	"	"	"	"	"	"	
Iron	**0.278**	0.050	"	"	"	"	06/05/19	"	
Lead	ND	0.005	"	"	"	"	06/03/19	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Warren Crossing (19E1059-02) Drinking Water	**Sampled: 05/31/19 11:00**		**Received: 05/31/19 13:00**						
Cadmium	ND	0.001	mg/l	1	9060361	06/03/19	06/03/19	EPA 200.8	
Chromium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.010	"	"	"	"	"	"	
Iron	ND	0.050	"	"	"	"	06/05/19	"	
Lead	ND	0.005	"	"	"	"	06/03/19	"	
Zinc	**0.023**	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N Kelly (19E1059-01) Drinking Water	**Sampled: 05/31/19 09:40**		**Received: 05/31/19 13:00**						
Ammonia as N	ND	0.10	mg/l	1	9053142	06/03/19	06/03/19	EPA 350.1	
Color	**44**	1	Color Units	"	9060369	05/31/19	05/31/19	SM2120 B	
Specific Conductance (EC)	**432**	1.00	umhos/cm	"	9061065	06/10/19	06/10/19	SM2510 B	
Hardness (Total)	**197**	10	mg CaCO3/L	"	9061046	06/10/19	06/10/19	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	"	9060366	05/31/19	05/31/19	SM5540 C	
Nitrate/Nitrite as N	**0.07**	0.05	"	"	9060609	06/06/19	06/06/19	EPA 353.2	
Total Kjeldahl Nitrogen	ND	0.5	"	"	9061038	06/10/19	06/11/19	EPA 351.2	
Dissolved Oxygen	**9.37**	0.10	"	"	9060425	05/31/19	05/31/19	SM4500-O G	HT-15
pH at 25 deg C	**6.83**	0.10	pH Units	"	9060367	05/31/19	05/31/19	SM4500-H+ B	HT-15
Orthophosphate as P	**0.09**	0.05	mg/l	"	9053145	05/31/19	05/31/19	SM4500 P E	
Phosphorus, Total	**0.16**	0.05	"	"	9060389	06/04/19	06/04/19	SM4500 P B, E	
Total Dissolved Solids	**315**	20.0	"	"	9060719	06/06/19	06/07/19	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9060717	06/06/19	06/07/19	SM2540 D	
Turbidity	**3.50**	0.05	NTU	"	9060370	05/31/19	05/31/19	SM2130 B	
Warren Crossing (19E1059-02) Drinking Water	**Sampled: 05/31/19 11:00**		**Received: 05/31/19 13:00**						
Ammonia as N	ND	0.10	mg/l	1	9053142	06/03/19	06/03/19	EPA 350.1	
Color	**31**	1	Color Units	"	9060369	05/31/19	05/31/19	SM2120 B	
Specific Conductance (EC)	**856**	1.00	umhos/cm	"	9061065	06/10/19	06/10/19	SM2510 B	
Hardness (Total)	**48**	10	mg CaCO3/L	"	9061046	06/10/19	06/10/19	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	"	9060366	05/31/19	05/31/19	SM5540 C	
Nitrate/Nitrite as N	ND	0.05	"	"	9060609	06/06/19	06/06/19	EPA 353.2	
Total Kjeldahl Nitrogen	ND	0.5	"	"	9061038	06/10/19	06/11/19	EPA 351.2	
Dissolved Oxygen	**9.22**	0.10	"	"	9060425	05/31/19	05/31/19	SM4500-O G	HT-15
pH at 25 deg C	**7.90**	0.10	pH Units	"	9060367	05/31/19	05/31/19	SM4500-H+ B	HT-15
Orthophosphate as P	ND	0.05	mg/l	"	9053145	05/31/19	05/31/19	SM4500 P E	
Phosphorus, Total	**0.17**	0.05	"	"	9060389	06/04/19	06/04/19	SM4500 P B, E	
Total Dissolved Solids	**586**	20.0	"	"	9060719	06/06/19	06/07/19	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9060717	06/06/19	06/07/19	SM2540 D	
Turbidity	**0.65**	0.05	NTU	"	9060370	05/31/19	05/31/19	SM2130 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N Kelly (19E1059-01) Drinking Water	**Sampled: 05/31/19 09:40**		**Received: 05/31/19 13:00**						
Total Coliforms	**240**	2	MPN/100 ml	1	9053131	05/31/19	06/04/19	SM 9221 B, E	
Fecal Coliforms	**8**	2	"	"	"	"	06/03/19	"	
Enterococcus	**220**	2	"	"	9060352	"	06/04/19	SM 9230 A, B	
Warren Crossing (19E1059-02) Drinking Water	**Sampled: 05/31/19 11:00**		**Received: 05/31/19 13:00**						
Total Coliforms	**900**	2	MPN/100 ml	1	9053131	05/31/19	06/04/19	SM 9221 B, E	
Fecal Coliforms	**110**	2	"	"	"	"	06/03/19	"	
Enterococcus	**130**	2	"	"	9060352	"	06/04/19	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Total Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060430										
Blank (9060430-BLK1)				Prepared: 06/04/19 Analyzed: 06/05/19						
Manganese	ND	0.005	mg/l							
Cadmium	ND	0.001	"							
Zinc	ND	0.020	"							
Copper	ND	0.010	"							
Lead	ND	0.005	"							
Iron	ND	0.050	"							
LCS (9060430-BS1)				Prepared: 06/04/19 Analyzed: 06/05/19						
Zinc	0.102	0.020	mg/l	0.100		102	85-115			
Lead	0.100	0.005	"	0.100		100	85-115			
Manganese	0.104	0.005	"	0.100		104	85-115			
Iron	0.109	0.050	"	0.100		109	85-115			
Copper	0.101	0.010	"	0.100		101	85-115			
Cadmium	0.106	0.001	"	0.100		106	85-115			
LCS Dup (9060430-BSD1)				Prepared: 06/04/19 Analyzed: 06/05/19						
Iron	0.107	0.050	mg/l	0.100		107	85-115	2	20	
Copper	0.102	0.010	"	0.100		102	85-115	1	20	
Manganese	0.105	0.005	"	0.100		105	85-115	0.4	20	
Lead	0.106	0.005	"	0.100		106	85-115	7	20	
Cadmium	0.107	0.001	"	0.100		107	85-115	1	20	
Zinc	0.103	0.020	"	0.100		103	85-115	1	20	
Duplicate (9060430-DUP1)		**Source: 19E0996-01**		Prepared: 06/04/19 Analyzed: 06/05/19						
Copper	0.007	0.010	mg/l		0.007			0.3	20	
Zinc	0.008	0.020	"		0.008			0.09	20	
Manganese	0.005	0.005	"		0.005			2	20	
Cadmium	0.0003	0.001	"		0.0002				20	
Lead	0.0007	0.005	"		0.0007			2	20	
Iron	0.020	0.050	"		0.015			33	20	QR-04

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Total Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060430										
Matrix Spike (9060430-MS1)		**Source: 19E0996-01**		Prepared: 06/04/19		Analyzed: 06/05/19				
Iron	0.113	0.050	mg/l	0.100	0.015	98	70-130			
Copper	0.098	0.010	"	0.100	0.007	92	70-130			
Cadmium	0.102	0.001	"	0.100	0.0002	102	70-130			
Zinc	0.102	0.020	"	0.100	0.008	93	70-130			
Lead	0.103	0.005	"	0.100	0.0007	103	70-130			
Manganese	0.106	0.005	"	0.100	0.005	101	70-130			
Matrix Spike (9060430-MS2)		**Source: 19F0083-04**		Prepared: 06/04/19		Analyzed: 06/05/19				
Cadmium	0.106	0.001	mg/l	0.100	ND	106	70-130			
Copper	0.096	0.010	"	0.100	0.001	95	70-130			
Iron	1.17	0.050	"	0.100	1.11	56	70-130			QM-4X
Manganese	0.144	0.005	"	0.100	0.039	105	70-130			
Zinc	0.106	0.020	"	0.100	0.006	100	70-130			
Lead	0.106	0.005	"	0.100	0.0006	106	70-130			
Matrix Spike Dup (9060430-MSD1)		**Source: 19E0996-01**		Prepared: 06/04/19		Analyzed: 06/05/19				
Cadmium	0.103	0.001	mg/l	0.100	0.0002	103	70-130	0.6	20	
Manganese	0.106	0.005	"	0.100	0.005	101	70-130	0.5	20	
Zinc	0.102	0.020	"	0.100	0.008	93	70-130	0.3	20	
Copper	0.099	0.010	"	0.100	0.007	92	70-130	0.8	20	
Iron	0.112	0.050	"	0.100	0.015	97	70-130	1	20	
Lead	0.106	0.005	"	0.100	0.0007	105	70-130	2	20	

Client Name: [redacted] **EMA Log #: 19E1059**
Project Name: Testing

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060361										
Blank (9060361-BLK1)				Prepared & Analyzed: 06/03/19						
Chromium	ND	0.005	mg/l							
Cadmium	ND	0.001	"							
Copper	ND	0.010	"							
Iron	ND	0.050	"							
Zinc	ND	0.020	"							
Lead	ND	0.005	"							
LCS (9060361-BS1)				Prepared & Analyzed: 06/03/19						
Chromium	0.099	0.005	mg/l	0.100		99	75-125			
Cadmium	0.102	0.001	"	0.100		102	85-115			
Zinc	0.100	0.020	"	0.100		100	85-115			
Copper	0.100	0.010	"	0.100		100	85-115			
Lead	0.102	0.005	"	0.100		102	75-125			
Iron	0.101	0.050	"	0.100		101	85-115			
LCS Dup (9060361-BSD1)				Prepared & Analyzed: 06/03/19						
Chromium	0.098	0.005	mg/l	0.100		98	75-125	1	20	
Cadmium	0.102	0.001	"	0.100		102	85-115	0.3	20	
Iron	0.101	0.050	"	0.100		101	85-115	0.2	20	
Zinc	0.099	0.020	"	0.100		99	85-115	0.5	20	
Copper	0.100	0.010	"	0.100		100	85-115	0.5	20	
Lead	0.101	0.005	"	0.100		101	75-125	1	20	
Duplicate (9060361-DUP1)		**Source: 19E1030-01**		Prepared & Analyzed: 06/03/19						
Chromium	ND	0.005	mg/l		ND				20	
Cadmium	ND	0.001	"		ND				20	
Lead	ND	0.005	"		ND				20	
Iron	0.006	0.050	"		0.006			0.3	20	
Zinc	0.003	0.020	"		0.002			5	20	
Copper	0.009	0.010	"		0.008			4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060361										
Matrix Spike (9060361-MS1)		**Source: 19E1030-01**		Prepared & Analyzed: 06/03/19						
Chromium	0.095	0.005	mg/l	0.100	ND	95	75-125			
Cadmium	0.099	0.001	"	0.100	ND	99	70-130			
Lead	0.102	0.005	"	0.100	ND	102	75-125			
Iron	0.101	0.050	"	0.100	0.006	95	70-130			
Zinc	0.097	0.020	"	0.100	0.002	95	70-130			
Copper	0.100	0.010	"	0.100	0.008	92	70-130			
Matrix Spike Dup (9060361-MSD1)		**Source: 19E1030-01**		Prepared & Analyzed: 06/03/19						
Cadmium	0.098	0.001	mg/l	0.100	ND	98	70-130	0.8	20	
Chromium	0.093	0.005	"	0.100	ND	93	75-125	2	20	
Zinc	0.096	0.020	"	0.100	0.002	94	70-130	1	20	
Iron	0.102	0.050	"	0.100	0.006	95	70-130	0.7	20	
Lead	0.103	0.005	"	0.100	ND	103	75-125	0.9	20	
Copper	0.098	0.010	"	0.100	0.008	89	70-130	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9053142										
Blank (9053142-BLK1)				Prepared & Analyzed: 06/03/19						
Ammonia as N	ND	0.10	mg/l							
LCS (9053142-BS1)				Prepared & Analyzed: 06/03/19						
Ammonia as N	0.96	0.10	mg/l	1.00		96	90-110			
LCS Dup (9053142-BSD1)				Prepared & Analyzed: 06/03/19						
Ammonia as N	0.98	0.10	mg/l	1.00		98	90-110	2	20	
Duplicate (9053142-DUP1)		**Source: 19E1042-05**		Prepared & Analyzed: 06/03/19						
Ammonia as N	0.08	0.10	mg/l		0.09			12	20	
Matrix Spike (9053142-MS1)		**Source: 19E1042-05**		Prepared & Analyzed: 06/03/19						
Ammonia as N	2.08	0.20	mg/l	2.00	0.09	100	90-110			
Matrix Spike Dup (9053142-MSD1)		**Source: 19E1042-05**		Prepared & Analyzed: 06/03/19						
Ammonia as N	2.03	0.20	mg/l	2.00	0.09	97	90-110	3	20	
Batch 9053145										
Blank (9053145-BLK1)				Prepared & Analyzed: 05/31/19						
Orthophosphate as P	ND	0.05	mg/l							
LCS (9053145-BS1)				Prepared & Analyzed: 05/31/19						
Orthophosphate as P	0.51	0.05	mg/l	0.500		103	80-120			
LCS Dup (9053145-BSD1)				Prepared & Analyzed: 05/31/19						
Orthophosphate as P	0.52	0.05	mg/l	0.500		103	80-120	0.2	20	

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9053145										
Duplicate (9053145-DUP1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Orthophosphate as P	0.02	0.05	mg/l		0.02			5	20	
Matrix Spike (9053145-MS1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Orthophosphate as P	0.54	0.05	mg/l	0.500	0.02	103	80-120			
Matrix Spike Dup (9053145-MSD1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Orthophosphate as P	0.54	0.05	mg/l	0.500	0.02	103	80-120	0.2	20	
Batch 9060366										
Blank (9060366-BLK1)				Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (9060366-BS1)				Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		97	80-120			
LCS Dup (9060366-BSD1)				Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		97	80-120	0.4	20	
Duplicate (9060366-DUP1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (9060366-MS1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00	ND	94	80-120			
Matrix Spike Dup (9060366-MSD1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	99	80-120	5	20	

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060367										
Duplicate (9060367-DUP1)		**Source: 19E1046-03**		Prepared & Analyzed: 06/03/19						
pH at 25 deg C	7.89	0.10	pH Units		7.82			0.9	20	
Reference (9060367-SRM1)				Prepared & Analyzed: 06/03/19						
pH at 25 deg C	5.80	0.10	pH Units	5.83		99	6.57-103.4			
Batch 9060369										
Blank (9060369-BLK1)				Prepared & Analyzed: 05/31/19						
Color	ND	1	Color Units							
Duplicate (9060369-DUP1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Color	31	1	Color Units		31			0	20	
Reference (9060369-SRM1)				Prepared & Analyzed: 05/31/19						
Color	49	1	Color Units	50.0		98	80-120			
Batch 9060370										
Blank (9060370-BLK1)				Prepared & Analyzed: 05/31/19						
Turbidity	ND	0.05	NTU							
Duplicate (9060370-DUP1)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Turbidity	0.65	0.05	NTU		0.65			0	20	
Reference (9060370-SRM1)				Prepared & Analyzed: 05/31/19						
Turbidity	6.02	0.05	NTU	5.97		101	85-112			

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060389										
Blank (9060389-BLK1)				Prepared & Analyzed: 06/04/19						
Phosphorus, Total	ND	0.05	mg/l							
LCS (9060389-BS1)				Prepared & Analyzed: 06/04/19						
Phosphorus, Total	0.53	0.05	mg/l	0.500		105	80-120			
LCS Dup (9060389-BSD1)				Prepared & Analyzed: 06/04/19						
Phosphorus, Total	0.52	0.05	mg/l	0.500		105	80-120	0.2	20	
Duplicate (9060389-DUP1)		**Source: 19E1042-06**		Prepared & Analyzed: 06/04/19						
Phosphorus, Total	0.24	0.05	mg/l		0.24			3	20	
Matrix Spike (9060389-MS1)		**Source: 19E1042-06**		Prepared & Analyzed: 06/04/19						
Phosphorus, Total	0.77	0.05	mg/l	0.500	0.24	107	80-120			
Matrix Spike Dup (9060389-MSD1)		**Source: 19E1042-06**		Prepared & Analyzed: 06/04/19						
Phosphorus, Total	0.77	0.05	mg/l	0.500	0.24	107	80-120	0.1	20	
Batch 9060425										
Duplicate (9060425-DUP1)		**Source: 19E1059-01**		Prepared & Analyzed: 05/31/19						
Dissolved Oxygen	9.36	0.10	mg/l		9.37			0.1	20	
Duplicate (9060425-DUP2)		**Source: 19E1059-02**		Prepared & Analyzed: 05/31/19						
Dissolved Oxygen	9.23	0.10	mg/l		9.22			0.1	20	
Batch 9060609										
Blank (9060609-BLK1)				Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	ND	0.05	mg/l							

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060609										
LCS (9060609-BS1)				Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	0.47	0.05	mg/l	0.500		94	90-110			
LCS Dup (9060609-BSD1)				Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	0.47	0.05	mg/l	0.500		95	90-110	0.8	20	
Duplicate (9060609-DUP1)		**Source: 19F0070-01**		Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	ND	0.05	mg/l		ND				20	
Matrix Spike (9060609-MS1)		**Source: 19F0070-01**		Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	0.94	0.10	mg/l	1.00	ND	94	90-110			
Matrix Spike Dup (9060609-MSD1)		**Source: 19F0070-01**		Prepared & Analyzed: 06/06/19						
Nitrate/Nitrite as N	0.94	0.10	mg/l	1.00	ND	94	90-110	0.4	20	
Batch 9060717										
Blank (9060717-BLK1)				Prepared: 06/06/19 Analyzed: 06/07/19						
Total Suspended Solids	ND	20.0	mg/l							
Duplicate (9060717-DUP1)		**Source: 19F0031-01**		Prepared: 06/06/19 Analyzed: 06/07/19						
Total Suspended Solids	ND	20.0	mg/l		ND				20	
Reference (9060717-SRM1)				Prepared: 06/06/19 Analyzed: 06/07/19						
Total Suspended Solids	100	20.0	mg/l	100		100	77.1-110			
Batch 9060719										
Blank (9060719-BLK1)				Prepared: 06/06/19 Analyzed: 06/07/19						
Total Dissolved Solids	ND	20.0	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060719										
Duplicate (9060719-DUP1)		**Source: 19F0031-01**		Prepared: 06/06/19 Analyzed: 06/07/19						
Total Dissolved Solids	527	20.0	mg/l		530			0.6	20	
Reference (9060719-SRM1)				Prepared: 06/06/19 Analyzed: 06/07/19						
Total Dissolved Solids	404	20.0	mg/l	411		98	9.05-111.3			
Batch 9061038										
Blank (9061038-BLK1)				Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							
LCS (9061038-BS1)				Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	0.9	0.5	mg/l	1.00		95	90-110			
LCS Dup (9061038-BSD1)				Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	0.9	0.5	mg/l	1.00		94	90-110	1	20	
Duplicate (9061038-DUP1)		**Source: 19E1042-03**		Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	0.4	0.5	mg/l		0.4			1	20	
Matrix Spike (9061038-MS1)		**Source: 19E1042-03**		Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	2.0	1.0	mg/l	2.00	ND	102	90-110			
Matrix Spike Dup (9061038-MSD1)		**Source: 19E1042-03**		Prepared: 06/10/19 Analyzed: 06/11/19						
Total Kjeldahl Nitrogen	2.0	1.0	mg/l	2.00	ND	100	90-110	2	20	
Batch 9061046										
Blank (9061046-BLK1)				Prepared & Analyzed: 06/10/19						
Hardness (Total)	ND	10	mg CaCO3/L							

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19E1059

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061046										
Duplicate (9061046-DUP1)		**Source: 19E1025-01**		Prepared & Analyzed: 06/10/19						
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 9061065										
Duplicate (9061065-DUP1)		**Source: 19F0050-01**		Prepared & Analyzed: 06/10/19						
Specific Conductance (EC)	4630	1.00	umhos/cm		4600			0.7	20	
Reference (9061065-SRM1)				Prepared & Analyzed: 06/10/19						
Specific Conductance (EC)	440	1.00	umhos/cm	448		98	9.96-110.0			

Client Name: [redacted]	**EMA Log #: 19E1059**
Project Name: Testing	

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QM-4X	The spike recovery was outside of the QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
HT-15	This sample was received outside of the EPA's recommended 15 minute holding time for this analysis. However, the sample was analyzed immediately upon receipt.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

19E1059

Page___ of___

CHAIN-OF-CUSTODY RECORD

– EnviroMatrix Analytical, Inc. –

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #:

Client: [redacted]

Attn:

Samplers(s): J. Carroll, C. Harman, K Kelly

Address: [redacted]

Phone: [redacted]

Email:

Billing A

Project ID:

Project #: PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Coliert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Color	Manganese	See attachment		
1	N-Kelly	5/31/19	9:40 a.m.	DW																				X	X	X		
2																												
3																												
4																												
5	Warren Crossing	5/31/19	11:00 a.m.	DW																				X	X	X		
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]Turn-Around-Time: □ Same Day □ 24 hr □ 48 hr ☒ 3 day □ 4 day □ 5 day ☒ STD (7 day)

[1]Reporting Requirements: □ Fax ☒ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]Sample Disposal: ☒ Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A	
Custody Seals Intact: Yes No N/A	Temp @ Receipt: 4.2°C on ice	
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler	

	RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	Cole Harman	5/31/19 1300	
Print	Cole Harman		Amanda Wallace
Company:			EMA
Signature			
Print			
Company:			
Signature			
Print			
Company:			

Project/Sample Comments:

① N-Kelly → grab @ 9:40 a.m. 6.80 gal/min flow
② Warren Crossing → composite @ ① 2:40 pm on 5/30/19 (8.57 gal/min) ② 7:25 pm on 5/30 10 gal/min
③ 7:20 a.m. on 5/31/19 (13.6 gal/min) ④ 11:00 a.m. 5/31/19 (13 gal/min)

micro bio @ 11:00 a.m (grab)

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

Analytical Services Quotation

Personal privacy Ex. (b) (6)
[redacted]

Bid Date: 04/12/2019
Bid Expires: 12/31/2019
Prices Expire: 12/31/2019

Matrix	Parameters	Method	#	TAT (days)	Unit Price	Extended Price
Water	Metals Digestion/Prep Fee	Method	3	7	$20.00	$60.00
Water	Cadmium (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Copper (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Iron (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Lead (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Zinc (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Cadmium (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Chromium (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Copper (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Iron (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Lead (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Zinc (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Ammonia as N	EPA 350.1	3	7	$30.00	$90.00
Water	Dissolved Oxygen	SM4500-O G	3	7	$20.00	$60.00
Water	Hardness	EPA 200.7	3	7	$35.00	$105.00
Water	MBAS	SM5540 C	3	7	$30.00	$90.00
Water	Nitrate-Nitrite as N	EPA 353.2	3	7	$30.00	$90.00
Water	Orthophosphate as P	SM4500 P E	3	7	$20.00	$60.00
Water	pH in water	SM4500-H+ B	3	7	$20.00	$60.00
Water	Specific Conductance (EC)	SM2510 B	3	7	$25.00	$75.00
Water	Total Dissolved Solids	SM2540 C	3	7	$25.00	$75.00
Water	Total Kjeldahl Nitrogen as N	EPA 351.2	3	7	$55.00	$165.00
Water	Total phosphate as P	SM4500 P B, E	3	7	$25.00	$75.00
Water	Total Suspended Solids	SM2540 D	3	7	$25.00	$75.00
Water	Turbidity	SM2130 B	3	7	$20.00	$60.00
Water	Coliform, Total & Fecal	SM 9221 B, E	3	7	$35.00	$105.00
Water	Enterococcus	SM 9230 A, B	3	7	$55.00	$165.00
						$1,985.00

1 9E1059

Dan Verdon
Laboratory Director
EnviroMatrix Analytical, Inc.

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☑ Visual ☐ Follow-Up ***Station Class:*** ☐ Field ☑ Removed, _____

Site ID:	Latitude: 33.9991	Outfall Size:
Location: N-Kelly APN: 278-210-1800	Longitude: -116.9756	
	HSA: 905.21	
	Observer(s): Kevin Kelly	
Date: May 31, 2019 Time: 9:40 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☒ Partly Cloudy ☐ Overcast ☐ Fog 58°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 6.80 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~ml~~ gal
Time to Fill	17.63	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☑ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☑ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☑ Other algal	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)		☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☑ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☑ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other _____ ☐ Unable to Determine

Basis for Source Identification: ☑ Observed Discharge ☑ Indirect Evidence ☑ Historical Data ☐ Other _____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	17°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☒ Visual ☐ Follow-Up **Station Class:** ☐ Field ☐ Removed,_____

Site ID:	**Latitude:** 33.0030	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 90521	
	Observer(s): Personal privacy Ex. (b)(6) Ly, Cole Harmon, Joseph Carroll	
Date: May 30, 2019 **Time:** 2:40 p.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☐ Overcast ☐ Fog

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 8.57 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~ml~~ 5gl
Time to Fill	14	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☒ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☒ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☒ None

Evidence of Illegal Dumping: ☒ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☒ Aquatic Health

Comments: Hydromodification due to abandoned CMP / blockage from upstream illegal waste deposits mobilized downstream.

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☒ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☒ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☒ Other Springs ☐ Unable to Determine

Basis for Source Identification: ☒ Observed Discharge ☐ Indirect Evidence ☒ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☒ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☐ Yes ☒ No **Analytical Lab Samples Collected?** ☐ Yes ☒ No See attached

Water Temp (°C)	23°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☒ Visual ☒ Follow-Up ***Station Class:*** ☐ Field ☐ Removed, _____

Site ID:	**Latitude:** 33.0030	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 905.21	
	Observer(s): [redacted], Cole Harmon, Joseph Carroll	
Date: May 30, 2019 **Time:** 7:25 p.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☐ Overcast ☐ Fog 63°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 10 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~L~~ 591
Time to Fill	12	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☒ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☒ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☒ None

Evidence of Illegal Dumping: ☒ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: Hydromodification due to [redacted] abandoned CMP / blockage from upstream illegal waste deposits mobilized downstream

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other_____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No see attached

Water Temp (°C)	18°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☐ Visual ☒ Follow-Up **Station Class:** ☐ Field ☐ Removed,_____

Site ID:	**Latitude:** 33.0030	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 905.21	
	Observer(s): [redacted] Cole Harmon, Jacob Carroll	
Date: May 31, 2019 **Time:** 7:20 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☒ Overcast ☐ Fog 59°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☐ Yes ☐ No

Flow Rate: 13.6 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	mL Gal
Time to Fill	8.8	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☒ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☒ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☐ None

Evidence of Illegal Dumping: ☒ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: Hydromodification due to abandoned CMP/blockage from upstream illegal waste deposits mobilized downstream.

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☒ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☒ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☒ Other springs ☐ Unable to Determine

Basis for Source Identification: ☒ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☒ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No See attached

Water Temp (°C)	17°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☒ Visual ☐ Follow-Up **Station Class:** ☐ Field ☐ Removed,_____

Site ID:	**Latitude:** 33.00330	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 905.21	
	Observer(s): [redacted] Cole Harmon, Joseph Carroll	
Date: May 31, 2019 **Time:** 11:00 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☒ Partly Cloudy ☐ Overcast ☐ Fog 66°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 13 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~gal~~ L
Time to Fill	9.2	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☒ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☒ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☒ None

Evidence of Illegal Dumping: ☒ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: Hydromodification due to abandoned CMP/blockage from upstream illegal waste deposits mobilized downstream

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☒ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☒ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☒ Other Springs ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☒ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	19°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

EnviroMatrix Analytical, Inc.

15 June 2019

Personal privacy Ex. (b)(6)
[redacted]

EMA Log #: 19F0112

Project Name: Testing
Project Desc./#:June 4, 2019

Enclosed are the results of analyses for samples received by the laboratory on 06/04/19 12:40. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N-Kelly	19F0112-01	Drinking Water	06/04/19 10:30	06/04/19 12:40
Warren Crossing	19F0112-02	Drinking Water	06/04/19 11:25	06/04/19 12:40

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Total Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Kelly (19F0112-01) Drinking Water	**Sampled: 06/04/19 10:30**		**Received: 06/04/19 12:40**						
Iron	**0.323**	0.050	mg/l	1	9061280	06/12/19	06/13/19	EPA 200.8	
Manganese	**0.026**	0.005	"	"	"	"	"	"	
Warren Crossing (19F0112-02) Drinking Water	**Sampled: 06/04/19 11:25**		**Received: 06/04/19 12:40**						
Iron	ND	0.050	mg/l	1	9061280	06/12/19	06/13/19	EPA 200.8	
Manganese	**0.006**	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Kelly (19F0112-01) Drinking Water	**Sampled: 06/04/19 10:30**		**Received: 06/04/19 12:40**						
Iron	**0.245**	0.050	mg/l	1	9061155	06/11/19	06/11/19	EPA 200.8	
Zinc	ND	0.020	"	"	"	"	"	"	
Warren Crossing (19F0112-02) Drinking Water	**Sampled: 06/04/19 11:25**		**Received: 06/04/19 12:40**						
Iron	ND	0.050	mg/l	1	9061155	06/11/19	06/11/19	EPA 200.8	
Zinc	**0.023**	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Kelly (19F0112-01) Drinking Water	**Sampled: 06/04/19 10:30**		**Received: 06/04/19 12:40**						
Ammonia as N	ND	0.10	mg/l	1	9061171	06/13/19	06/13/19	EPA 350.1	
Color	**26**	1	Color Units	"	9060618	06/05/19	06/05/19	SM2120 B	
Specific Conductance (EC)	**452**	1.00	umhos/cm	"	9061065	06/10/19	06/10/19	SM2510 B	
Hardness (Total)	**52**	10	mg CaCO3/L	"	9061161	06/11/19	06/12/19	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	"	9060628	06/05/19	06/05/19	SM5540 C	
Nitrate/Nitrite as N	**0.07**	0.05	"	"	9060826	06/08/19	06/08/19	EPA 353.2	
Total Kjeldahl Nitrogen	ND	0.5	"	"	9061157	06/11/19	06/12/19	EPA 351.2	
Dissolved Oxygen	**8.91**	0.10	"	"	9060608	06/04/19	06/04/19	SM4500-O G	HT-15
pH at 25 deg C	**6.94**	0.10	pH Units	"	9060562	06/04/19	06/04/19	SM4500-H+ B	HT-15
Orthophosphate as P	**0.11**	0.05	mg/l	"	9060390	06/04/19	06/04/19	SM4500 P E	
Phosphorus, Total	**0.21**	0.05	"	"	9061042	06/07/19	06/07/19	SM4500 P B, E	
Total Dissolved Solids	**339**	20.0	"	"	9061053	06/07/19	06/10/19	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9061154	06/10/19	06/11/19	SM2540 D	
Sulfate as SO4	**19.6**	5.0	"	"	9060432	06/04/19	06/04/19	SM4500 SO4 E	
Turbidity	**3.40**	0.05	NTU	"	9060563	06/04/19	06/04/19	SM2130 B	
Warren Crossing (19F0112-02) Drinking Water	**Sampled: 06/04/19 11:25**		**Received: 06/04/19 12:40**						
Ammonia as N	ND	0.10	mg/l	1	9061171	06/13/19	06/13/19	EPA 350.1	
Color	**26**	1	Color Units	"	9060618	06/05/19	06/05/19	SM2120 B	
Specific Conductance (EC)	**899**	1.00	umhos/cm	"	9061065	06/10/19	06/10/19	SM2510 B	
Hardness (Total)	**218**	10	mg CaCO3/L	"	9061161	06/11/19	06/12/19	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	"	9060628	06/05/19	06/05/19	SM5540 C	
Nitrate/Nitrite as N	ND	0.05	"	"	9060826	06/08/19	06/08/19	EPA 353.2	
Total Kjeldahl Nitrogen	ND	0.5	"	"	9061157	06/11/19	06/12/19	EPA 351.2	
Dissolved Oxygen	**9.21**	0.10	"	"	9060608	06/04/19	06/04/19	SM4500-O G	HT-15
pH at 25 deg C	**7.89**	0.10	pH Units	"	9060562	06/04/19	06/04/19	SM4500-H+ B	HT-15
Orthophosphate as P	**0.10**	0.05	mg/l	"	9060390	06/04/19	06/04/19	SM4500 P E	
Phosphorus, Total	**0.18**	0.05	"	"	9061042	06/07/19	06/07/19	SM4500 P B, E	
Total Dissolved Solids	**587**	20.0	"	"	9061053	06/07/19	06/10/19	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9061154	06/10/19	06/11/19	SM2540 D	
Sulfate as SO4	**128**	50.0	"	10	9060432	06/04/19	06/04/19	SM4500 SO4 E	
Turbidity	**0.50**	0.05	NTU	1	9060563	06/04/19	06/04/19	SM2130 B	

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Kelly (19F0112-01) Drinking Water	**Sampled: 06/04/19 10:30**		**Received: 06/04/19 12:40**						
Total Coliforms	**220**	2	MPN/100 ml	1	9060435	06/04/19	06/08/19	SM 9221 B, E	
Fecal Coliforms	ND	2	"	"	"	"	06/07/19	"	
Enterococcus	**240**	2	"	"	9060436	"	06/08/19	SM 9230 A, B	
Warren Crossing (19F0112-02) Drinking Water	**Sampled: 06/04/19 11:25**		**Received: 06/04/19 12:40**						
Total Coliforms	**900**	2	MPN/100 ml	1	9060435	06/04/19	06/08/19	SM 9221 B, E	
Fecal Coliforms	**22**	2	"	"	"	"	06/07/19	"	
Enterococcus	**240**	2	"	"	9060436	"	06/08/19	SM 9230 A, B	

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Total Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061280										
Blank (9061280-BLK1)				Prepared: 06/12/19 Analyzed: 06/13/19						
Iron	ND	0.050	mg/l							
Manganese	ND	0.005	"							
LCS (9061280-BS1)				Prepared: 06/12/19 Analyzed: 06/13/19						
Iron	0.101	0.050	mg/l	0.100		101	85-115			
Manganese	0.110	0.005	"	0.100		110	85-115			
LCS Dup (9061280-BSD1)				Prepared: 06/12/19 Analyzed: 06/13/19						
Manganese	0.111	0.005	mg/l	0.100		111	85-115	0.4	20	
Iron	0.098	0.050	"	0.100		98	85-115	3	20	
Duplicate (9061280-DUP1)		**Source: 19E0779-02RE1**		Prepared: 06/12/19 Analyzed: 06/13/19						
Manganese	0.011	0.005	mg/l		0.010			14	20	
Iron	0.026	0.050	"		0.025			6	20	
Matrix Spike (9061280-MS1)		**Source: 19E0779-02RE1**		Prepared: 06/12/19 Analyzed: 06/13/19						
Iron	0.128	0.050	mg/l	0.100	0.025	104	70-130			
Manganese	0.116	0.005	"	0.100	0.010	107	70-130			
Matrix Spike Dup (9061280-MSD1)		**Source: 19E0779-02RE1**		Prepared: 06/12/19 Analyzed: 06/13/19						
Manganese	0.116	0.005	mg/l	0.100	0.010	106	70-130	0.3	20	
Iron	0.123	0.050	"	0.100	0.025	98	70-130	4	20	

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061155										
Blank (9061155-BLK1)				Prepared & Analyzed: 06/11/19						
Zinc	ND	0.020	mg/l							
Iron	ND	0.050	"							
LCS (9061155-BS1)				Prepared & Analyzed: 06/11/19						
Iron	0.100	0.050	mg/l	0.100		100	85-115			
Zinc	0.101	0.020	"	0.100		101	85-115			
LCS Dup (9061155-BSD1)				Prepared & Analyzed: 06/11/19						
Iron	0.100	0.050	mg/l	0.100		100	85-115	0.6	20	
Zinc	0.101	0.020	"	0.100		101	85-115	0.3	20	
Duplicate (9061155-DUP1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/11/19						
Iron	0.236	0.050	mg/l		0.245			3	20	
Zinc	0.001	0.020	"		0.001			3	20	
Matrix Spike (9061155-MS1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/11/19						
Zinc	0.098	0.020	mg/l	0.100	0.001	97	70-130			
Iron	0.336	0.050	"	0.100	0.245	91	70-130			
Matrix Spike Dup (9061155-MSD1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/11/19						
Iron	0.341	0.050	mg/l	0.100	0.245	96	70-130	2	20	
Zinc	0.099	0.020	"	0.100	0.001	97	70-130	0.3	20	

Client Name: [redacted] **EMA Log #: 19F0112**
Project Name: Testing

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060390										
Blank (9060390-BLK1)				Prepared & Analyzed: 06/04/19						
Orthophosphate as P	ND	0.05	mg/l							
LCS (9060390-BS1)				Prepared & Analyzed: 06/04/19						
Orthophosphate as P	0.50	0.05	mg/l	0.500		99	80-120			
LCS Dup (9060390-BSD1)				Prepared & Analyzed: 06/04/19						
Orthophosphate as P	0.49	0.05	mg/l	0.500		98	80-120	1	20	
Duplicate (9060390-DUP1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/04/19						
Orthophosphate as P	0.12	0.05	mg/l		0.11			14	20	
Matrix Spike (9060390-MS1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/04/19						
Orthophosphate as P	0.61	0.05	mg/l	0.500	0.11	99	80-120			
Matrix Spike Dup (9060390-MSD1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/04/19						
Orthophosphate as P	0.60	0.05	mg/l	0.500	0.11	98	80-120	1	20	
Batch 9060432										
Blank (9060432-BLK1)				Prepared & Analyzed: 06/04/19						
Sulfate as SO4	ND	5.0	mg/l							
LCS (9060432-BS1)				Prepared & Analyzed: 06/04/19						
Sulfate as SO4	9.1	5.0	mg/l	10.0		91	80-120			
LCS Dup (9060432-BSD1)				Prepared & Analyzed: 06/04/19						
Sulfate as SO4	9.6	5.0	mg/l	10.0		96	80-120	6	20	

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060432										
Duplicate (9060432-DUP1)		**Source: 19E0849-01**		Prepared & Analyzed: 06/04/19						
Sulfate as SO4	10.6	5.0	mg/l		10.5			0.6	20	
Matrix Spike (9060432-MS1)		**Source: 19E0849-01**		Prepared & Analyzed: 06/04/19						
Sulfate as SO4	19.7	5.0	mg/l	10.0	10.5	92	80-120			
Matrix Spike Dup (9060432-MSD1)		**Source: 19E0849-01**		Prepared & Analyzed: 06/04/19						
Sulfate as SO4	19.6	5.0	mg/l	10.0	10.5	91	80-120	0.3	20	
Batch 9060562										
Duplicate (9060562-DUP1)		**Source: 19F0076-02**		Prepared & Analyzed: 06/04/19						
pH at 25 deg C	10.2	0.10	pH Units		10.2			0.3	20	
Reference (9060562-SRM1)				Prepared & Analyzed: 06/04/19						
pH at 25 deg C	5.82	0.10	pH Units	5.83		100	6.57-103.4			
Batch 9060563										
Blank (9060563-BLK1)				Prepared & Analyzed: 06/04/19						
Turbidity	ND	0.05	NTU							
Duplicate (9060563-DUP1)		**Source: 19F0050-01**		Prepared & Analyzed: 06/04/19						
Turbidity	0.35	0.05	NTU		0.35			0	20	
Reference (9060563-SRM1)				Prepared & Analyzed: 06/04/19						
Turbidity	5.84	0.05	NTU	5.97		98	85-112			

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060608										
Duplicate (9060608-DUP1)		**Source: 19F0112-01**		Prepared & Analyzed: 06/04/19						
Dissolved Oxygen	8.88	0.10	mg/l		8.91			0.3	20	
Duplicate (9060608-DUP2)		**Source: 19F0112-02**		Prepared & Analyzed: 06/04/19						
Dissolved Oxygen	9.17	0.10	mg/l		9.21			0.4	20	
Batch 9060618										
Blank (9060618-BLK1)				Prepared & Analyzed: 06/05/19						
Color	ND	1	Color Units							
Duplicate (9060618-DUP1)		**Source: 19F0113-01**		Prepared & Analyzed: 06/05/19						
Color	ND	1	Color Units		ND				20	
Reference (9060618-SRM1)				Prepared & Analyzed: 06/05/19						
Color	50	1	Color Units	50.0		100	80-120			
Batch 9060628										
Blank (9060628-BLK1)				Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (9060628-BS1)				Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		88	80-120			
LCS Dup (9060628-BSD1)				Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		88	80-120	0.5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060628										
Duplicate (9060628-DUP1)		**Source: 19F0212-01**		Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	ND	0.5	mg/l		0.1				20	
Matrix Spike (9060628-MS1)		**Source: 19F0212-01**		Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00	0.1	84	80-120			
Matrix Spike Dup (9060628-MSD1)		**Source: 19F0212-01**		Prepared & Analyzed: 06/05/19						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	0.1	85	80-120	0.3	20	
Batch 9060826										
Blank (9060826-BLK1)				Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (9060826-BS1)				Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500		96	90-110			
LCS Dup (9060826-BSD1)				Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500		96	90-110	0.6	20	
Duplicate (9060826-DUP1)		**Source: 19F0071-40**		Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	0.02	0.10	mg/l		0.02			0	20	
Matrix Spike (9060826-MS1)		**Source: 19F0071-40**		Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	0.98	0.10	mg/l	1.00	0.02	96	90-110			
Matrix Spike Dup (9060826-MSD1)		**Source: 19F0071-40**		Prepared & Analyzed: 06/08/19						
Nitrate/Nitrite as N	0.97	0.10	mg/l	1.00	0.02	95	90-110	0.4	20	

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061042										
Blank (9061042-BLK1)				Prepared & Analyzed: 06/07/19						
Phosphorus, Total	ND	0.05	mg/l							
LCS (9061042-BS1)				Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.45	0.05	mg/l	0.500		90	80-120			
LCS Dup (9061042-BSD1)				Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.46	0.05	mg/l	0.500		92	80-120	2	20	
Duplicate (9061042-DUP1)		**Source: 19F0157-01**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.17	0.05	mg/l		0.18			7	20	
Duplicate (9061042-DUP2)		**Source: 19F0071-16**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.18	0.05	mg/l		0.18			0.6	20	
Matrix Spike (9061042-MS1)		**Source: 19F0157-01**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.66	0.05	mg/l	0.500	0.18	95	80-120			
Matrix Spike (9061042-MS2)		**Source: 19F0071-16**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.64	0.05	mg/l	0.500	0.18	93	80-120			
Matrix Spike Dup (9061042-MSD1)		**Source: 19F0157-01**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.66	0.05	mg/l	0.500	0.18	95	80-120	0.2	20	
Matrix Spike Dup (9061042-MSD2)		**Source: 19F0071-16**		Prepared & Analyzed: 06/07/19						
Phosphorus, Total	0.64	0.05	mg/l	0.500	0.18	91	80-120	0.9	20	
Batch 9061053										
Blank (9061053-BLK1)				Prepared: 06/07/19 Analyzed: 06/10/19						
Total Dissolved Solids	ND	20.0	mg/l							

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061053										
Duplicate (9061053-DUP1)		**Source: 19F0081-01**		Prepared: 06/07/19 Analyzed: 06/10/19						
Total Dissolved Solids	862	20.0	mg/l		854			0.9	20	
Reference (9061053-SRM1)				Prepared: 06/07/19 Analyzed: 06/10/19						
Total Dissolved Solids	404	20.0	mg/l	411		98	9.05-111.3			
Batch 9061065										
Duplicate (9061065-DUP1)		**Source: 19F0050-01**		Prepared & Analyzed: 06/10/19						
Specific Conductance (EC)	4630	1.00	umhos/cm		4600			0.7	20	
Reference (9061065-SRM1)				Prepared & Analyzed: 06/10/19						
Specific Conductance (EC)	440	1.00	umhos/cm	448		98	9.96-110.0			
Batch 9061154										
Blank (9061154-BLK1)				Prepared: 06/10/19 Analyzed: 06/11/19						
Total Suspended Solids	ND	20.0	mg/l							
Duplicate (9061154-DUP1)		**Source: 19F0142-01**		Prepared: 06/10/19 Analyzed: 06/11/19						
Total Suspended Solids	407	20.0	mg/l		407			0	20	
Reference (9061154-SRM1)				Prepared: 06/10/19 Analyzed: 06/11/19						
Total Suspended Solids	98.0	20.0	mg/l	100		98	77.1-110			
Batch 9061157										
Blank (9061157-BLK1)				Prepared: 06/11/19 Analyzed: 06/12/19						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061157										
LCS (9061157-BS1)				Prepared: 06/11/19	Analyzed: 06/12/19					
Total Kjeldahl Nitrogen	1.0	0.5	mg/l	1.00		98	90-110			
LCS Dup (9061157-BSD1)				Prepared: 06/11/19	Analyzed: 06/12/19					
Total Kjeldahl Nitrogen	1.0	0.5	mg/l	1.00		99	90-110	1	20	
Duplicate (9061157-DUP1)		**Source: 19F0071-41**		Prepared: 06/11/19	Analyzed: 06/12/19					
Total Kjeldahl Nitrogen	ND	0.5	mg/l		ND				20	
Matrix Spike (9061157-MS1)		**Source: 19F0071-41**		Prepared: 06/11/19	Analyzed: 06/12/19					
Total Kjeldahl Nitrogen	2.0	1.0	mg/l	2.00	ND	98	90-110			
Matrix Spike Dup (9061157-MSD1)		**Source: 19F0071-41**		Prepared: 06/11/19	Analyzed: 06/12/19					
Total Kjeldahl Nitrogen	2.0	1.0	mg/l	2.00	ND	100	90-110	2	20	
Batch 9061161										
Blank (9061161-BLK1)				Prepared: 06/11/19	Analyzed: 06/12/19					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9061161-DUP1)		**Source: 19F0092-01**		Prepared: 06/11/19	Analyzed: 06/12/19					
Hardness (Total)	194	10	mg CaCO3/L		199			2	20	
Batch 9061171										
Blank (9061171-BLK1)				Prepared & Analyzed: 06/13/19						
Ammonia as N	ND	0.10	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: Testing

EMA Log #: 19F0112

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061171										
LCS (9061171-BS1)				Prepared & Analyzed: 06/13/19						
Ammonia as N	0.96	0.10	mg/l	1.00		96	90-110			
LCS Dup (9061171-BSD1)				Prepared & Analyzed: 06/13/19						
Ammonia as N	0.97	0.10	mg/l	1.00		97	90-110	0.5	20	
Duplicate (9061171-DUP1)		**Source: 19F0234-01**		Prepared & Analyzed: 06/13/19						
Ammonia as N	0.06	0.10	mg/l		0.05			9	20	
Matrix Spike (9061171-MS1)		**Source: 19F0234-01**		Prepared & Analyzed: 06/13/19						
Ammonia as N	2.03	0.20	mg/l	2.00	0.05	99	90-110			
Matrix Spike Dup (9061171-MSD1)		**Source: 19F0234-01**		Prepared & Analyzed: 06/13/19						
Ammonia as N	2.01	0.20	mg/l	2.00	0.05	98	90-110	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)	**EMA Log #: 19F0112**
Project Name: Testing	

Notes and Definitions

HT-15	This sample was received outside of the EPA's recommended 15 minute holding time for this analysis. However, the sample was analyzed immediately upon receipt.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHAIN-OF-CUSTODY RECORD 19F0112

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #:

Client: [redacted] Personal privacy Ex. (b)(6)
Attn:
Samplers(s): John Peterson
Address: P.O. Box 517
Boulevard Springs Ca. 92004
Phone: 858-220-0877 Fax:
Email: petersonenv@hotmail.com
Billing Address: Personal privacy Ex. (b)(6) [redacted]
Project ID:
Project #: PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015 (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ N-N □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	N-Kelly	6/4/19	10:30 a.m.	DW																				x	Color	x	see attachment		
2																													
3																													
4	Warren Crossing	6/4/19	11:25 a.m.	DW																				x		x		x	
5																													
6																													
7																													
8																													
9																													
10																													

See attachment

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]Turn-Around-Time: □ Same Day □ 1 day □ 2 day □ 3 day □ 4 day □ 5 day ☒ STD (7-business days)

[1]Reporting Requirements: □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT □ CEDEN □ SDWIS

[1]Sample Disposal: ☒ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A
Custody Seals Intact: Yes No N/A
COC/Labels Agree: Yes No N/A
Containers Properly Preserved: Yes No N/A
Temp @ Receipt: 6°C Ice
Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: John Peterson	1240 6/4/19	Signature:
Print: John Peterson		Print: Mary Bell
Company: Pet Environmental		Company: EMA
Signature:		Signature:
Print:		Print:
Company:		Company:
Signature:		Signature:
Print:		Print:
Company:		Company:

Project/Sample Location/Address:

Project/Sample Comments:

[1]Additional costs may apply. Please note there is a $35 minimum charge for all clients.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

Analytical Services Quotation

Testing

Personal privacy Ex. (b) (6)

Bid Date: 04/12/2019
Bid Expires: 12/31/2019
Prices Expire: 12/31/2019

Matrix	Parameters	Method	#	TAT (days)	Unit Price	Extended Price
Water	Metals Digestion/Prep Fee	Method	3	7	$20.00	$60.00
Water	Iron (Total)	EPA 200.8	3	7	$15.00	$45.00
Water	Iron (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Zinc (Diss)	EPA 200.8	3	7	$15.00	$45.00
Water	Ammonia as N	EPA 350.1	3	7	$30.00	$90.00
Water	Dissolved Oxygen	SM4500-O G	3	7	$20.00	$60.00
Water	Hardness	EPA 200.7	3	7	$35.00	$105.00
Water	MBAS	SM5540 C	3	7	$30.00	$90.00
Water	Nitrate-Nitrite as N	EPA 353.2	3	7	$30.00	$90.00
Water	Orthophosphate as P	SM4500 P E	3	7	$20.00	$60.00
Water	pH in water	SM4500-H+ B	3	7	$20.00	$60.00
Water	Specific Conductance (EC)	SM2510 B	3	7	$25.00	$75.00
Water	Sulfate	SM4500 SO4 E	3	7	$20.00	$60.00
Water	Total Dissolved Solids	SM2540 C	3	7	$25.00	$75.00
Water	Total Kjeldahl Nitrogen as N	EPA 351.2	3	7	$55.00	$165.00
Water	Total phosphate as P	SM4500 P B, E	3	7	$25.00	$75.00
Water	Total Suspended Solids	SM2540 D	3	7	$25.00	$75.00
Water	Turbidity	SM2130 B	3	7	$20.00	$60.00
Water	Coliform, Total & Fecal	SM 9221 B, E	3	7	$35.00	$105.00
Water	Enterococcus	SM 9230 A, B	3	7	$55.00	$165.00
						$1,605.00

19F0112

Dan Verdon
Laboratory Director
EnviroMatrix Analytical, Inc.

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☒ Visual ☐ Follow-Up **Station Class:** ☐ Field ☐ Removed, _____

Site ID:	**Latitude:** 33.9991	**Outfall Size:**
Location: N-Kelly APN: 278-210-1800	**Longitude:** -116.9756	
	HSA: 905.21	
	Observer(s): John Peterson	
Date: June 4, 2019	**Time:** 10:30 a.m.	

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☒ Overcast ☐ Fog 60°F

Last Rain ☒ 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 6.3 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	5	~~ml~~ gal
Time to Fill	47.3	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☒ Other algal	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)		☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☒ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other _____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other _____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	17°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☐ Visual ☐ Follow-Up *Station Class:* ☐ Field ☐ Removed, _____

Site ID:	Latitude: 32.9979	Outfall Size:
Location: J-Rock APN: 278-210-1800	Longitude: -116.9759 HSA: 905.21 Observer(s): John Peterson	
Date: June 4, 2019 Time: 10:05 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☒ Overcast ☐ Fog 66°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☐ Flowing ☐ Ponded ☒ Dry **Flow reaches receiving water?:** ☐ Yes ☐ No N/A

Flow Rate: _____ ☐ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☐ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☐ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☐ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other_____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☒ na (dry)

Source ID/Elimination Notes: _____

Field Screening Samples Collected? Yes ☒ No **Analytical Lab Samples Collected?** Yes ☐ No ☒

Water Temp (°C)		NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☒ Visual ☐ Follow-Up **Station Class:** ☐ Field ☐ Removed,_____

Site ID:	**Latitude:** 33.0630	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 905.21	
	Observer(s): John Peterson	
Date: June 4, 2019 **Time:** 11:25 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☒ Overcast ☐ Fog 64°F Air

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 21.4 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~ml~~ Gal
Time to Fill	3.6	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☒ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☒ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☒ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☒ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☒ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other_____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	18°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

EnviroMatrix Analytical, Inc.

25 June 2019

[redacted]

EMA Log #: 19F0488

Project Name: June 14, 2019

Enclosed are the results of analyses for samples received by the laboratory on 06/14/19 09:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: Personal privacy Ex. (b) (6)
Project Name: June 14, 2019

EMA Log #: 19F0488

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Warren Crossing	19F0488-01	Drinking Water	06/14/19 06:30	06/14/19 09:20
N-Kelly Spring	19F0488-02	Drinking Water	06/14/19 08:15	06/14/19 09:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: June 14, 2019

EMA Log #: 19F0488

Total Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Warren Crossing (19F0488-01) Drinking Water Sampled: 06/14/19 06:30 Received: 06/14/19 09:20									
Iron	**0.056**	0.050	mg/l	1	9061920	06/19/19	06/19/19	EPA 200.8	
N-Kelly Spring (19F0488-02) Drinking Water Sampled: 06/14/19 08:15 Received: 06/14/19 09:20									
Iron	**0.644**	0.050	mg/l	1	9061920	06/19/19	06/19/19	EPA 200.8	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: [redacted]
Project Name: June 14, 2019

EMA Log #: 19F0488

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Warren Crossing (19F0488-01) Drinking Water	**Sampled: 06/14/19 06:30**		**Received: 06/14/19 09:20**						
Color	**12**	1	Color Units	1	9061733	06/14/19	06/14/19	SM2120 B	
Nitrate/Nitrite as N	ND	0.05	mg/l	"	9061749	06/17/19	06/17/19	EPA 353.2	
Phosphorus, Total	**0.08**	0.05	"	"	9062149	06/21/19	06/21/19	SM4500 P B, E	
Total Dissolved Solids	**726**	20.0	"	"	9061941	06/19/19	06/20/19	SM2540 C	
N-Kelly Spring (19F0488-02) Drinking Water	**Sampled: 06/14/19 08:15**		**Received: 06/14/19 09:20**						
Color	**26**	1	Color Units	1	9061733	06/14/19	06/14/19	SM2120 B	
Nitrate/Nitrite as N	ND	0.05	mg/l	"	9061749	06/17/19	06/17/19	EPA 353.2	
Phosphorus, Total	**0.08**	0.05	"	"	9062149	06/21/19	06/21/19	SM4500 P B, E	
Total Dissolved Solids	**329**	20.0	"	"	9061941	06/19/19	06/20/19	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: June 14, 2019

EMA Log #: 19F0488

Total Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061920										
Blank (9061920-BLK1)				Prepared & Analyzed: 06/19/19						
Iron	ND	0.050	mg/l							
LCS (9061920-BS1)				Prepared & Analyzed: 06/19/19						
Iron	0.105	0.050	mg/l	0.100		105	85-115			
LCS Dup (9061920-BSD1)				Prepared & Analyzed: 06/19/19						
Iron	0.100	0.050	mg/l	0.100		100	85-115	5	20	
Duplicate (9061920-DUP1)		**Source: 19F0442-11**		Prepared & Analyzed: 06/19/19						
Iron	0.014	0.050	mg/l		0.009			39	20	QR-04
Matrix Spike (9061920-MS1)		**Source: 19F0442-11**		Prepared & Analyzed: 06/19/19						
Iron	0.105	0.050	mg/l	0.100	0.009	96	70-130			
Matrix Spike Dup (9061920-MSD1)		**Source: 19F0442-11**		Prepared & Analyzed: 06/19/19						
Iron	0.106	0.050	mg/l	0.100	0.009	96	70-130	0.8	20	

Client Name: [redacted]
Project Name: June 14, 2019

EMA Log #: 19F0488

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061733										
Blank (9061733-BLK1)				Prepared & Analyzed: 06/14/19						
Color	ND	1	Color Units							
Duplicate (9061733-DUP1)		**Source: 19F0488-01**		Prepared & Analyzed: 06/14/19						
Color	11	1	Color Units		12			9	20	
Reference (9061733-SRM1)				Prepared & Analyzed: 06/14/19						
Color	50	1	Color Units	50.0		100	80-120			
Batch 9061749										
Blank (9061749-BLK1)				Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (9061749-BS1)				Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	0.50	0.05	mg/l	0.500		100	90-110			
LCS Dup (9061749-BSD1)				Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	0.49	0.05	mg/l	0.500		98	90-110	2	20	
Duplicate (9061749-DUP1)		**Source: 19F0497-01**		Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	0.05	0.05	mg/l		0.05			2	20	
Matrix Spike (9061749-MS1)		**Source: 19F0497-01**		Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	1.03	0.10	mg/l	1.00	0.05	98	90-110			
Matrix Spike Dup (9061749-MSD1)		**Source: 19F0497-01**		Prepared & Analyzed: 06/17/19						
Nitrate/Nitrite as N	1.02	0.10	mg/l	1.00	0.05	97	90-110	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Personal privacy Ex. (b) (6)
Project Name: June 14, 2019

EMA Log #: 19F0488

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061941										
Blank (9061941-BLK1)				Prepared: 06/19/19 Analyzed: 06/20/19						
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9061941-DUP1)		**Source: 19F0584-01**		Prepared: 06/19/19 Analyzed: 06/20/19						
Total Dissolved Solids	852	20.0	mg/l		858			0.7	20	
Reference (9061941-SRM1)				Prepared: 06/19/19 Analyzed: 06/20/19						
Total Dissolved Solids	412	20.0	mg/l	411		100	89.05-111.3			
Batch 9062149										
Blank (9062149-BLK1)				Prepared & Analyzed: 06/21/19						
Phosphorus, Total	ND	0.05	mg/l							
LCS (9062149-BS1)				Prepared & Analyzed: 06/21/19						
Phosphorus, Total	0.54	0.05	mg/l	0.500		108	80-120			
LCS Dup (9062149-BSD1)				Prepared & Analyzed: 06/21/19						
Phosphorus, Total	0.54	0.05	mg/l	0.500		108	80-120	0.4	20	
Duplicate (9062149-DUP1)		**Source: 19F0706-03**		Prepared & Analyzed: 06/21/19						
Phosphorus, Total	0.11	0.05	mg/l		0.11			4	20	
Matrix Spike (9062149-MS1)		**Source: 19F0706-03**		Prepared & Analyzed: 06/21/19						
Phosphorus, Total	0.65	0.05	mg/l	0.500	0.11	108	80-120			
Matrix Spike Dup (9062149-MSD1)		**Source: 19F0706-03**		Prepared & Analyzed: 06/21/19						
Phosphorus, Total	0.67	0.05	mg/l	0.500	0.11	112	80-120	3	20	

Client Name: Personal privacy Ex. (b) (6)	**EMA Log #: 19F0488**
Project Name: June 14, 2019	

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

19F0488

Page___ of ___

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA [redacted]

Project ID:

Project #: PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015 (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ N-N □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Coliert, T-E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Phosphorus	Iron	Color	TDS
1	Warren Crossing	6/10/19	6:30 a.m.	DW											X									X	X	X	X
2																											
3																											
4																											
5	N-Kelly Spring	6/11/19	8:15 a.m.	DW											X									X	X	X	X
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS X Client Drop Off □ Other

[1]Turn-Around-Time: □ Same Day □ 1 day □ 2 day □ 3 day □ 4 day □ 5 day X STD (7-business days)

[1]Reporting Requirements: □ Fax X PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT □ CEDEN □ SDWIS

[1]Sample Disposal: X By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	6/14/19 9:20	Signature
Print [redacted] Personal privacy Ex. (b)(6)		Print Jonathan Hastie
Company:		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Location/Address:

Project/Sample Comments:

[1]Additional costs may apply. Please note there is a $35 minimum charge for all clients.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☑ Visual ☑ Follow-Up ***Station Class:*** ☐ Field ☐ Removed, _____

Site ID:	**Latitude:** 32.9979	**Outfall Size:**
Location: S-Rock APN: 278-210-1800	**Longitude:** -116.9759	
	HSA: 905.21	
	Observer(s): [redacted]	
Date: June 14, 2019 **Time:** 8:20		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☐ Overcast ☐ Fog 59°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☐ Flowing ☐ Ponded ☒ Dry **Flow reaches receiving water?:** ☐ Yes ☑ No

Flow Rate: _____ ☐ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☐ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☐ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☐ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other _____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other _____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes: _____

Field Screening Samples Collected? Yes No				**Analytical Lab Samples Collected?** Yes No			
Water Temp (°C)		NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☑ Visual ☑ Follow-Up ***Station Class:*** ☐ Field ☐ Removed,_____

Site ID:	Latitude: 33.9991	Outfall Size:
Location: N-Kelly APN: 278-210-1800	Longitude: -116.9756 HSA: 905.21 Observer(s): [redacted]	
Date: June 14, 2019 Time: 8:15 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☐ Overcast ☐ Fog 59°C

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☑ Yes ☐ No

Flow Rate: 1-3 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* estimated ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☑ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☑ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☑ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)		☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☐ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other_____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	17°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

City of Poway
Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: ☑ Visual ☑ Follow-Up ***Station Class:*** ☐ Field ☐ Removed, _____

Site ID:	**Latitude:** 33.6030	**Outfall Size:** 48"
Location: Warren Crossing Poway, CA	**Longitude:** -117.0057	
	HSA: 905.21	
	Observer(s): Personal privacy Ex. (b)(6)	
Date: June 14, 2019 **Time:** 6:30 a.m.		

Conveyance (select only one) ☐ Outlet ☐ Manhole ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Other

Atmospheric Conditions

Weather ☐ Clear ☐ Partly Cloudy ☐ Overcast ☐ Fog 59°F

Last Rain ☒ > 72 hours ☐ < 72 hours but ≤ 0.1"

Flow

Water Flow ☒ Flowing ☐ Ponded ☐ Dry **Flow reaches receiving water?:** ☒ Yes ☐ No

Flow Rate: 2.5 ☒ gpm ☐ cfs *Fill in flow rate calculation supporting information below if applicable.* ☐ Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8*
*Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume	2	~~gal~~ 3 gal
Time to Fill	48	sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8*
Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.

Observations

Odor	☑ None	☐ Sewage	☐ Sulfides	☐ Petroleum	☐ Manure	☐ Other	☐ na (dry)
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	☐ na (dry)
Clarity	☑ Clear	☐ Cloudy (> 4" vis)	☐ Murky (< 4" vis)			☐ Other	☐ na (dry)
Floatables	☐ None	☐ Trash	☐ Bubbles	☐ Foam	☐ Oily Sheen	☐ Other	☐ na (dry)
Deposits	☐ None	☐ Coarse Particulates	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Structural Condition (select only one)	☐ Normal	☐ Damaged	☐ Scour Pond	☐ Erosion	☐ Blockage	☐ Other	

Trash Assessment

Rating ☐ High (>400 pieces) ☐ Medium (50 to 400 pieces) ☐ Low (<50 pieces) ☑ None

Evidence of Illegal Dumping: ☐ Yes *(describe in comments)* ☐ No **Potential Threat To:** ☐ Human Health ☐ Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: ☐ Odor ☐ Color ☐ Clarity ☐ Floatables ☐ High Flow ☐ Non-Standard Connection ☐ Other _____ ☐ No

Flow Source: ☐ Groundwater ☐ Seepage ☐ Irrigation Runoff ☐ Vehicle Washing ☐ Wet Cleaning ☐ Construction ☐ na (dry)
☐ Pool or Spa ☐ Water Line Break ☐ NPDES Permitted Discharge ☐ Other_____ ☐ Unable to Determine

Basis for Source Identification: ☐ Observed Discharge ☐ Indirect Evidence ☐ Historical Data ☐ Other_____ ☐ na (Not Determined/Dry)

If Identified, Was Source Eliminated? *(If yes, describe in notes below)* ☐ Yes ☐ No ☐ na (dry)

Source ID/Elimination Notes:

Field Screening Samples Collected? ☒ Yes ☐ No **Analytical Lab Samples Collected?** ☒ Yes ☐ No

Water Temp (°C)	17.5°C	NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab No. M31977

Reported: 2-14-19

Client: [redacted]

Received: 2-11-19 1100AM

Sample: Water

Identification:
Site Code: 1000
Sampled by: KK
DateTime: 2-9-19 748AM
Type of sample: Water
Chlorine Residue: NA
Sample Site: Kelly Spring 33.991 Lat -116.9752 Long

RESULTS

Total Coliform	Presence = 870.4 mpn/1ooml	Method 9223B
E Coli	Presence = 32.1 mpn/100ml	Method 9223B

Date Start: 2-11-19
Time Start: 1130AM
Date Completed: 2-12-19
Time Completed: 1100AM
Date Reported: 2-14-19

Linda L. Webster
Lab supervisor

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/28/2019 22:35
Project: Water Analysis
Project Number: 23575: [redacted]
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1904684-01 | **Client Sample Name:** Kelly Spring 33.9991 LAT-116.9752 Long, 2/9/2019 7:48:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Aluminum	**0.27**	**mg/L**	**0.020**	**0.014**	**EPA-200.8**	ND		1
Total Recoverable Arsenic	ND	mg/L	0.0020	0.00070	EPA-200.8	ND		1
Total Recoverable Barium	**0.045**	**mg/L**	**0.0010**	**0.00021**	**EPA-200.8**	ND		1
Total Recoverable Cadmium	ND	mg/L	0.0010	0.00011	EPA-200.8	ND		1
Total Recoverable Chromium	**0.0016**	**mg/L**	**0.0030**	**0.00050**	**EPA-200.8**	0.0018	J	1
Total Recoverable Copper	**0.00096**	**mg/L**	**0.0020**	**0.00022**	**EPA-200.8**	ND	J	1
Total Recoverable Iron	**0.35**	**mg/L**	**0.050**	**0.030**	**EPA-200.7**	ND		2
Total Recoverable Lead	ND	mg/L	0.0010	0.00010	EPA-200.8	ND		1
Total Recoverable Manganese	ND	mg/L	0.010	0.0040	EPA-200.7	ND		2
Total Recoverable Mercury	**0.000058**	**mg/L**	**0.00020**	**0.000029**	**EPA-245.1**	0.000060	J	3
Total Recoverable Selenium	**0.0013**	**mg/L**	**0.0020**	**0.00019**	**EPA-200.8**	0.00029	J	1
Total Recoverable Silver	ND	mg/L	0.0010	0.00010	EPA-200.8	ND		1
Total Recoverable Zinc	**0.041**	**mg/L**	**0.010**	**0.0017**	**EPA-200.8**	0.0029		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	02/22/19 07:45	02/22/19 13:29	ARD	PE-EL3	1	B038262
2	EPA-200.7	02/22/19 07:40	02/22/19 16:32	JRG	PE-OP2	1	B038259
3	EPA-245.1	02/20/19 09:00	02/20/19 14:35	JP1	CETAC2	1	B038089

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/28/2019 22:35
Project: Water Analysis
Project Number: 23575: [redacted]
Project Manager: Linda Webster

Water Analysis (General Chemistry)

BCL Sample ID: 1904684-01 | **Client Sample Name:** Kelly Spring 33.9991 LAT-116.9752 Long, 2/9/2019 7:48:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Calcium	**11**	**mg/L**	**0.10**	**0.014**	**EPA-200.7**	ND		1
Total Recoverable Magnesium	**7.6**	**mg/L**	**0.050**	**0.019**	**EPA-200.7**	ND		1
Total Recoverable Sodium	**77**	**mg/L**	**0.50**	**0.051**	**EPA-200.7**	ND		1
Total Recoverable Potassium	**2.0**	**mg/L**	**1.0**	**0.10**	**EPA-200.7**	ND		1
Fluoride	**0.10**	**mg/L**	**0.050**	**0.012**	**EPA-300.0**	ND		2
Nitrate as N	**4.9**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND	**A26,S05**	2
Sulfate	**17**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	ND		2
MBAS	ND	mg/L	0.10	0.015	EPA-425.1	ND	A26,S05	3
Nitrite as N	ND	mg/L	0.050	0.010	EPA-353.2	ND	A26,S05	4
Total Phosphorus	ND	mg/L	0.050	0.017	EPA-365.4	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	02/22/19 07:40	02/22/19 16:32	JRG	PE-OP2	1	B038259
2	EPA-300.0	02/13/19 17:00	02/13/19 23:27	SAV	IC2	1	B037692
3	EPA-425.1	02/14/19 08:15	02/14/19 08:15	JMN	SPEC06	1	B037737
4	EPA-353.2	02/14/19 10:32	02/14/19 10:32	MC1	KONE-1	1	B037830
5	EPA-365.4	02/19/19 20:30	02/25/19 12:45	JMH	SC-1	1	B038057

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab no: 23575

Reported: 4-16-18

Client: Personal privacy Ex. (b)(6)

Received: 2-11-19

Sample: Water

Identification: Kelly Spring 33.9991 Lat -116.9752 Long

	Results	Units	DLR	Method
Calcium	11	mg/l	0.05	200.7
Magnesium	7.6	mg/l	0.05	200.7
Sodium	77	mg/l	0.05	200.7
Bicarbonate	27	mg/l	1	2320B
Sulfate	17	mg/l	NA	300
Chloride	121	mg/l	1	4500CLB
Nitrate	4.9	mg/l	0.10	300
Nitrite	<0.050	mg/l	0.010	300
MBAS	<0.10	mg/l	0.10	5540C
Iron	0.35	mg/l	0.05	3120B
Fluoride	0.10	mg/l	0.02	300
Copper	0.00096	mg/l	50	200.8
Manganese	<0.01	mg/l	0.01	3120B
Zinc	0.041	mg/l	50	3120B
pH	6.40	units	NA	4500HB
Conductivity	355	mic/cm	10	2510B
Total dissolved solids	464	mg/l	1	2540C
Hardness	96	mg/l	1	2340
Alkalinity	NA	mg/l	1	2130B

ATS Environmental, Inc

104 S 8th Street
Brawley, Ca. 92227
760-344-2532
FAX 760-344-3459

Lab no: 23075

Date Reported: 4-16-19

Client: Personal privacy Ex. (b)(6)

Date Received: 2-11-19

Sample: Water

Identification: Kelly Spring 33.9991 Lat -116.9752 Long

Turbidity	NA	NTU	0.05	2130A
Odor	NA	units	1	2150A
Color	NA	units	1	2120A
Arsenic	<0.0020	mg/l	NA	200.8
Barium	0.045	mg/l	NA	200.8
Cadmium	<0.010	mg/l	0.005	200.8
Chromium	0.0016	mg/l	NA	200.8
Lead	<0.0010	mg/l	0.002	200.8
Mercury	0.000058	mg/l	0.0020	245.1
Selenium	0.0013	mg/l	0.0020	200.8
Silver	<0.0010	mg/l	0.0010	200.8
Aluminum	<0.05	mg/l	NA	200.8

Portion of analysis by B C Laboratories 1904684, copy of report enclosed

Linda L Webster

Linda L. Webster, Lab supervisor

ATS ENVIRONMENTAL
104 S. 8th St.
Brawley, CA 92227
Tel: (760) 344-2532
Fax: (760) 344-3459

CHAIN OF CUSTODY

LAB NO:	**23575**
DATE:	**2-11-19**

Client: Personal privacy Ex. (b)(6) [redacted]	
Address:	**Phone:**
	Fax:

SAMPLE INFORMATION

ID NO:	SAMPLE ID	DATE SAMPLE	MATRIX (w, dw,solid, ww, liq, soil)	SAMPLE TIME	ANALYSIS
1	KELLY SPRING 33.9991 LAT -116.9752 LONG	2-9-19	W	748AM	CA,CU,MBAS,FE MG,MN,NA,SO4,ZN ,AL,BA,AS,CD,CR,P B,HG,NO3 AS N,NO2 AS N SE,AG,F,P
	REGULAR TITLE 22				

Sampler's Name: Personal privacy Ex. (b)(6) [redacted]	Temp in range: Yes No

Relinquished By: Personal privacy Ex. (b)(6) [redacted]	Date: 2-9-19	Time: 1110AM
Received By: LINDA	Date: 2-9-19	Time:1110AM 16.9
Relinquished By:	Date:	Time:
Received By:	Date:	Time:

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/28/2019 18:47
Project: Water Analysis
Project Number: 23576: [redacted]
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1904683-01 | **Client Sample Name:** Mouth of Warren Creek 33.0039 LAT -117-00569 Long, 2/9/2019 6:35:00AM, Kevin Kelly

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Aluminum	ND	mg/L	0.020	0.014	EPA-200.8	ND		1
Total Recoverable Arsenic	ND	mg/L	0.0020	0.00070	EPA-200.8	ND		1
Total Recoverable Barium	**0.080**	**mg/L**	**0.0010**	**0.00021**	**EPA-200.8**	ND		1
Total Recoverable Boron	**0.21**	**mg/L**	**0.020**	**0.0017**	**EPA-200.8**	0.0054		1
Total Recoverable Cadmium	ND	mg/L	0.0010	0.00011	EPA-200.8	ND		1
Total Recoverable Chromium	**0.0011**	**mg/L**	**0.0030**	**0.00050**	**EPA-200.8**	0.0018	J	1
Total Recoverable Copper	**0.0039**	**mg/L**	**0.0020**	**0.00022**	**EPA-200.8**	ND		1
Total Recoverable Iron	ND	mg/L	0.050	0.030	EPA-200.7	ND		2
Total Recoverable Lead	ND	mg/L	0.0010	0.00010	EPA-200.8	ND		1
Total Recoverable Manganese	ND	mg/L	0.010	0.0040	EPA-200.7	ND		2
Total Recoverable Mercury	**0.000030**	**mg/L**	**0.00020**	**0.000029**	**EPA-245.1**	0.000060	J	3
Total Recoverable Selenium	**0.0024**	**mg/L**	**0.0020**	**0.00019**	**EPA-200.8**	0.00029		1
Total Recoverable Silver	ND	mg/L	0.0010	0.00010	EPA-200.8	ND		1
Total Recoverable Zinc	**0.022**	**mg/L**	**0.010**	**0.0017**	**EPA-200.8**	0.0029		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	02/22/19 07:45	02/22/19 14:36	ARD	PE-EL3	1	B038262
2	EPA-200.7	02/22/19 07:40	02/22/19 16:29	JRG	PE-OP2	1	B038259
3	EPA-245.1	02/20/19 09:00	02/20/19 14:33	JP1	CETAC2	1	B038089

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/28/2019 18:47
Project: Water Analysis
Project Number: 23576: [redacted]
Project Manager: Linda Webster

Water Analysis (General Chemistry)

BCL Sample ID: 1904683-01 | **Client Sample Name:** Mouth of Warren Creek 33.0039 LAT -117-00569 Long, 2/9/2019 6:35:00AM, Kevin Kelly

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Calcium	**160**	**mg/L**	**0.10**	**0.014**	**EPA-200.7**	ND		1
Total Recoverable Magnesium	**140**	**mg/L**	**0.050**	**0.019**	**EPA-200.7**	ND		1
Total Recoverable Sodium	**340**	**mg/L**	**0.50**	**0.051**	**EPA-200.7**	ND		1
Total Recoverable Potassium	**4.2**	**mg/L**	**1.0**	**0.10**	**EPA-200.7**	ND		1
Fluoride	**0.28**	**mg/L**	**0.25**	**0.060**	**EPA-300.0**	ND	**A07**	2
Nitrate as N	**2.5**	**mg/L**	**0.50**	**0.10**	**EPA-300.0**	ND	**A07,A26,S05**	2
Sulfate	**770**	**mg/L**	**5.0**	**0.65**	**EPA-300.0**	ND	**A07**	2
MBAS	**0.033**	**mg/L**	**0.10**	**0.015**	**EPA-425.1**	ND	**J,A26,S05**	3
Nitrite as N	ND	mg/L	0.050	0.010	EPA-353.2	ND	A26,S05	4
Total Phosphorus	ND	mg/L	0.050	0.017	EPA-365.4	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	02/22/19 07:40	02/22/19 16:29	JRG	PE-OP2	1	B038259
2	EPA-300.0	02/13/19 20:00	02/14/19 00:00	EMM	IC5	5	B037691
3	EPA-425.1	02/14/19 08:15	02/14/19 08:15	JMN	SPEC06	1	B037737
4	EPA-353.2	02/14/19 10:32	02/14/19 10:32	MC1	KONE-1	1	B037830
5	EPA-365.4	02/19/19 20:30	02/25/19 12:44	JMH	SC-1	1	B038057

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab no: 23576

Reported: 4-16-18

Client [redacted]

Received: 2-11-19

Sample: Water

Identification: Mouth of Warren Creek 33.0039 Lat -117.00569 Long

	Results	Units	DLR	Method
Calcium	160	mg/l	0.05	200.7
Magnesium	140	mg/l	0.05	200.7
Sodium	340	mg/l	0.05	200.7
Bicarbonate	165	mg/l	1	2320B
Sulfate	770	mg/l	NA	300
Chloride	560	mg/l	1	4500CLB
Nitrate	2.5	mg/l	0.10	300
Nitrite	<0.050	mg/l	0.010	300
MBAS	0.033	mg/l	0.10	5540C
Iron	<0.050	mg/l	0.05	3120B
Fluoride	0.28	mg/l	0.02	300
Copper	0.0039	mg/l	50	200.8
Manganese	<0.01	mg/l	0.01	3120B
Zinc	0.022	mg/l	50	3120B
pH	8.04	units	NA	4500HB
Conductivity	2190	mic/cm	10	2510B
Total dissolved solids	2245	mg/l	1	2540C
Hardness	868	mg/l	1	2340
Alkalinity	NA	mg/l	1	2130B

ATS Environmental, Inc

104 S 8th Street
Brawley, Ca. 92227
760-344-2532
FAX 760-344-3459

Lab no: 23076

Date Reported: 4-16-19

Client: [redacted]

Date Received: 2-11-19

Sample: Water

Identification: Mouth of Warren Creek 33.0039 Lat -117.00569 Long

Turbidity	NA	NTU	0.05	2130A
Odor	NA	units	1	2150A
Color	NA	units	1	2120A
Arsenic	<0.0020	mg/l	NA	200.8
Barium	0.080	mg/l	NA	200.8
Cadmium	<0.010	mg/l	0.005	200.8
Chromium	0.0011	mg/l	NA	200.8
Lead	<0.0010	mg/l	0.002	200.8
Mercury	0.000030	mg/l	0.0020	245.1
Selenium	0.0024	mg/l	0.0020	200.8
Silver	<0.0010	mg/l	0.0010	200.8
Aluminum	<0.02	mg/l	NA	200.8

Portion of analysis by B C Laboratories 1904683, copy of report enclosed

Linda L Webster

Linda L. Webster, Lab supervisor

ATS ENVIRONMENTAL
104 S. 8th St.
Brawley, CA 92227
Tel: (760) 344-2532
Fax: (760) 344-3459

CHAIN OF CUSTODY

LAB NO:	**23576**
DATE:	**2-11-19**

Client: Personal privacy Ex. (b)(6) [redacted]	
Address:	**Phone:**
	Fax:

SAMPLE INFORMATION

ID NO:	SAMPLE ID	DATE SAMPLE	MATRIX (w, dw,solid, ww, liq, soil)	SAMPLE TIME	ANALYSIS
1	MOUTH OF WARREN CREEK 33.0039 LAT -117-00569 LONG	2-9-19	W	635AM	CA,CU,MBAS,FE MG,MN,NA,SO4,ZN ,AL,BA,AS,CD,CR,P B,HG,NO3 AS N,NO2 AS N SE,AG,F,P
	REGULAR TITLE 22				

Sampler's Name: Personal privacy Ex. (b)(6) [redacted]	Temp in range: Yes No

Relinquished By: KK	Date: 2-9-19	Time: 1110AM
Received By: LINDA	Date: 2-9-19	Time:1110AM 16.9
Relinquished By:	Date:	Time:
Received By:	Date:	Time:

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab No. M31976

Reported: 2-14-19

Client: [redacted]

Received: 2-11-19 1100AM

Sample: Water

Identification:
Site Code: 1000
Sampled by: KK
DateTime: 2-9-19
Type of sample: Water
Chlorine Residue: NA
Sample Site: Warren Crossing 33.0030 Lat -117.0057 Long

RESULTS

Total Coliform	Presence = >2419.2 mpn/1ooml	Method 9223B
E Coli	Presence = 38.1 mpn/100ml	Method 9223B

Date Start: 2-11-19
Time Start: 1130AM
Date Completed: 2-12-19
Time Completed: 1100AM
Date Reported: 2-14-19

Linda L Webster

Linda L. Webster
Lab supervisor

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/27/2019 17:09
Project: Water Analysis
Project Number: 23597: [redacted]
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1905668-01 | **Client Sample Name:** Warren Creek Mouth @ Footbridge 33.0039 LAT -117.0069 Long, 2/16/2019 7:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Iron	**7.4**	**mg/L**	**0.050**	**0.030**	**EPA-200.7**	ND		1
Total Recoverable Manganese	**0.15**	**mg/L**	**0.010**	**0.0040**	**EPA-200.7**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	02/27/19 10:45	02/27/19 14:43	JRG	PE-OP2	1	B038760

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab no: 23597

Reported: 4-16-19

Client [redacted]

Received: 2-19-19

Sample: Water

Identification: Warren Creek Mouth 33.0039 Lat -117.0069 Long

Analysis	Results	Units	MDL	Date	Method
Iron	7.4	mg/l	0.050	2-27-19	200.7
Manganese	0.15	mg/l	0.010	2-27-19	200.7
Turbidity	119.0	ntu	1	2-22-19	2130A
Total Dissolved Solids	361	mg/l	1	2-20-19	2540C

Portion of analysis by B C Laboratories 1905668 copy of report enclosed

Linda L Webster

Linda L. Webster
Lab supervisor

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab No. M32002

Reported: 2-25-19

Client: [redacted]

Received: 2-19-19 1125AM

Sample: Water

Identification:
Site Code: 1000
Sampled by: KK
DateTime: 2-18-19 327PM
Type of sample: Water
Chlorine Residue: NA
Sample Site: Warren Crossing 48" 33.0030 Lat -117.0057 Long

RESULTS

Total Coliform	Presence = 1011.1 mpn/100ml	Method 9223B
E Coli	Presence = 435 mpn/100ml	Method 9223B

Date Start: 2-19-19
Time Start: 1200PM
Date Completed: 2-20-19
Time Completed: 1100AM
Date Reported: 2-25-19

Linda L. Webster
Lab supervisor

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 02/27/2019 17:27
Project: Water Analysis
Project Number: 23599: [redacted]
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1905670-01 | **Client Sample Name:** Rock Haven Spring 33.9978 LAT -116.9793 Long, 2/18/2019 3:27:00PM, KK

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Iron	**1.6**	**mg/L**	**0.050**	**0.030**	**EPA-200.7**	ND		1
Total Recoverable Manganese	**0.016**	**mg/L**	**0.010**	**0.0040**	**EPA-200.7**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	02/27/19 10:45	02/27/19 14:48	JRG	PE-OP2	1	B038760

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 03/15/2019 10:26
Project: Water Analysis
Project Number: 23652- [redacted]
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1907337-01 | **Client Sample Name:** Rock Haven Spring 32.9978 LAT-116.9753 LAT, 2/28/2019 7:58:00AM, KM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Iron	0.70	mg/L	0.050	0.030	EPA-200.7	ND		1
Total Recoverable Manganese	0.0043	mg/L	0.010	0.0040	EPA-200.7	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	03/13/19 19:45	03/14/19 17:22	JRG	PE-OP2	1	B040217

ATS Laboratories
104 S. 8th Street
Brawley, CA 92227

Reported: 03/19/2019 11:26
Project: Drinking Water Analysis
Project Number: Drinking Water Analyses
Project Manager: Linda Webster

Metals Analysis

BCL Sample ID: 1907335-01 | **Client Sample Name:** Fishermans Foot Bridge 33.0030 Long -117.0060 LAT, 2/28/2019 9:16:00AM, KK

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Recoverable Iron	1900	ug/L	50	30	EPA-200.7	ND		1
Total Recoverable Manganese	47	ug/L	10	4.0	EPA-200.7	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.7	03/13/19 19:45	03/15/19 11:06	JCC	PE-OP2	1	B040216

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab No. M32137

Reported: 3-14-19

Client: [redacted]

Received: 3-11-19 225PM

Sample: Water

Identification:
Site Code: 1000
Sampled by: KK
DateTime: 3-11-19 1048AM
Type of sample: Water
Chlorine Residue mg/l: NA
Sample Site: Kelly Spring 33.9991 Lat -116.9752 Long

RESULTS

Total Coliform	Presence = 344.1 mpn/100ml	Method 9223B
E Coli	Absence = < 1 mpn/100ml	

Date Start: 3-11-19
Time Start: 230PM
Date Completed: 3-12-19
Time Completed: 200PM
Date Reported: 3-14-19

Linda L Webster

Linda L. Webster
Lab supervisor

ATS Environmental, Inc
104 S 8th Street
Brawley, Ca. 92227
760-344-2532
Fax 760-344-3459

Lab No. M32136

Reported: 3-14-19

Client: [redacted]

Received: 3-11-19 225PM

Sample: Water

Identification:
Site Code: 1000
Sampled by: KK
DateTime: 3-11-19 914AM
Type of sample: Water
Chlorine Residue mg/l: NA
Sample Site: Warren Crossing 33.0030 Lat -117.0057 Long

RESULTS

Total Coliform	Presence = 791.5 mpn/100ml	Method 9223B
E Coli	Presence = 38.9 mpn/100ml	

Date Start: 3-11-19
Date Completed: 3-12-19
Date Reported: 3-14-19

Time Start: 230PM
Time Completed: 200PM

Linda L. Webster
Lab supervisor

Personal privacy Ex. (b)(6)
[redacted]

November 5, 2018

Andrew Wheeler
Acting Administrator of the Environmental Protection Agency
Environmental Protection Agency
Mail Code: 1101A
Office of the Administrator
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460
Wheeler.Andrew@epa.gov

David W. Gibson
Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108
David.Gibson@waterboards.ca.gov

Mike Stoker
Regional Administrator of the Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105
r9.info@epa.gov

Eileen Sobeck, Executive Director
California State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812
Eileen.Sobeck@waterboards.ca.gov

Tina White
City Manager
City of Poway
13325 Civic Center Drive
Poway, California 92064

Sent via certified mail

60-day Notice to Sue the City of Poway under the Clean Water Act and the Endangered Species Act

I. INTRODUCTION

1. When the City of Poway incorporated as a general law city in San Diego County in December 1980, the former Poway Municipal Water District became part of the City structure, including its earthen dam in Warren Canyon near the base of Mount Woodson. The dam, 160 feet high and 1,060 feet wide, created a 62-acre lake over a blue-line seasonal stream called Warren Creek. This reservoir, now known as Lake Poway, serves as a local emergency water supply and is able to store over one billion gallons of water at one time.[1]

2. While most of the water from Lake Poway is usually imported by the San Diego County Water Authority and piped in and out of the reservoir on a regular basis, natural runoff can fill almost one third of the reservoir's capacity during wetter years. This natural runoff is funneled into the reservoir from two seasonal streams that merge into one, with one coming from the Mount Woodson cornerstone, the other coming from the Rock Haven Cornerstone. From the merged streams, the reservoir has been designed to capture millions of gallons of storm runoff as well as natural spring water emanating from both Mount Woodson and Rock Haven.

3. Inevitably, with this storm and spring water, sediment along with other pollutants are transported through these streams and into Lake Poway. Unfortunately, over a long period of time and without sustainable management, sediment deposits will gradually displace the volume area that was previously used for water storage until eventually the reservoir becomes completely filled with sediment. As water storage is lost, the beneficial uses that depend on storage – such as water supply and flood control – also will decline and eventually will be lost.

4. The City of Poway has a system of unpaved roads above Lake Poway that serve as hiking trails

[1] Once in Lake Poway, the water from the reservoir is pulled into the Lester J. Bergland Water Treatment Plant via a public water supply intake structure for further purification into drinking water. Also, some of this purified water is pumped back into the reservoir for storage.

leading to the famous Mount Woodson peak and the Potato Chip Rock landmark. These trails contain at least four unpermitted and unauthorized culvert-with-dirt-backfill stream crossings over natural creeks above Lake Poway and one unpermitted wooden footbridge across waters of the state and United States, as well as at least eight more cross-drainage culverts along the unpaved road that also drain directly into Lake Poway.

5. Over the past 25 years, the City of Poway has never obtained the proper Clean Water Act permits and *individual* water quality certifications for the placement, maintenance, and replacement of dredged and fill material in the seasonal and ephemeral tributaries above Lake Poway.

6. There are also about 20 private residences in Warren Canyon within the City of Poway and upstream of Lake Poway, and a number of these private residences also contain unpermitted and unauthorized culvert-with-dirt backfill stream crossings and other illicit discharges/connections and *mobile* pollutants placed within Warren Creek.

7. Many of these culvert crossings failed during the winter storms of 2017, including at least two unpermitted and unauthorized culvert crossings owned by the City of Poway, which resulted in an unreasonable amount of sedimentation pollution into Lake Poway caused by anthropogenic sources from *mobile* pollutants.

8. A significant portion of the polluted water discharged into Lake Poway was non-storm spring water that flowed during periods of dry weather, collecting sedimentation pollution from and through private residences' point sources and the City's point sources before flowing into the reservoir.

9. After the winter storms of 2017, the City of Poway again conducted unauthorized and unpermitted dredging and filling activities in waters of the United States including rebuilding culvert-with-dirt-backfill stream crossings that have not been engineered to withstand storm surges of an expected an 50-year storm event.

10. The City has used a generalized emergency Department of the Army permit to repair its main tributary crossing on April 17-20, 2017; however, the City has not met the generalized emergency permit conditions because the rebuilding efforts were not fully described in the emergency permit (other structures, dirt fill, and dredged materials were placed in the historical stream), the [illegible] efforts

ATTACHMENT A

occurred during non-emergency storm conditions (winter rains practically ceased by the end of February 2017), and the reconstruction occurred in proximity to the City's public water supply intake within the reservoir (the emergency permit cannot be used in this type of situation).

11. These 2017 rebuilding efforts in the Lake Poway area took place when Poway's City Council suspended environmental review of its projects after it declared a weather "state of emergency" in a year with a near average amount of rainfall. After the heavy rains of January and February 2017, it hardly rained at all in March and April 2017. Inexplicably, this "state of emergency" was not lifted until March of 2018. Under this shroud, the City of Poway conducted all of its rebuilding activities in the Lake Poway area and in Waters of the United States during non-emergency circumstances and during the dry spring, summer, and fall months.

12. The City of Poway does not permit private landowners to construct culvert with earth-fill road crossings over blue-line streams on private property in Warren Canyon; yet, in hypocritical fashion, the City has recently built culvert with earth-fill road crossings in proximity to Lake Poway, a public water supply that intakes storm water and non-storm water from the local mountains and that contains a public water supply intake into a drinking water purification plant.

13. Lake Poway is not an enclosed conveyance system or a terminal reservoir.

14. Lake Poway is not a strictly intrastate body of water. It is composed of navigable-in-fact waters that are hydrologically connected to the Pacific Ocean which is 17 miles away; moreover, the waters of Lake Poway have been used in interstate commerce.

    a. Foth-CLE Engineering Group, a Wisconsin based company, was paid to use its vessel and attached equipment to navigate and survey Lake Poway in 2018 by the City of Poway, a California municipal corporation).

    b. The reservoir is and could be used by interstate or foreign travelers for recreational or other purposes; and

    c. Fish could be taken from the reservoir and sold in interstate commerce.

15. The reservoir has a high downstream hazard risk of flooding according to the state of California because of the seasonal streams feeding the reservoir. Water flooded over the dam in 1997, which was

naturally funneled into Lake Hodges and into the Pacific Ocean below.

16. The area below the dam was almost inundated in 2017. Had it rained another inch during the first week of March 2017, water would have spilled over the dam (Poway was able to successfully prevent flooding in 2017 by removing some of the water from the reservoir during the final days of February 2017).

17. Water also naturally seeps underneath the dam, flows out of an outlet pipe, and spills over a spillway during times of flooding. This water flows down into the San Dieguito River and thence the Pacific Ocean.

18. The City of Poway has a license to use a fixed amount of the water from Warren Creek, which is a tributary to the San Dieguito River and thence the Pacific Ocean. The amount cannot exceed 858 acre-feet and it can only be collected by the reservoir between November 1 of each year to May 31 of the succeeding year. The City of Poway must maintain an outlet pipe of adequate capacity in the dam as near as practicable to the bottom of the natural stream channel in order that water entering the reservoir which is not authorized for appropriation under its license may be released.

19. The City of Poway also has a water rights agreement with the City of San Diego, in which the City of San Diego owns half the waters rights of Warren Creek above Lake Poway.

20. The historical record shows that approximately 1000 acre feet of water from Warren Creek has filled Lake Poway in a given season (e.g., the 1979-1980 season) and that well over 100,000 gallons of water a minute can surge through the main tributary during a 50-year storm event.

21. During the last 25 years, the City of Poway has mismanaged its local water supplies by underreporting the amount of natural runoff that flows into Lake Poway during wetter years. This underreporting is due to the fact that the City of San Diego owns half of the water rights coming from the tributary feeding Lake Poway, and the City of Poway does not want to pay the City of San Diego back for its fair share of water annually.

22. Poway's City Engineer did not do his job of overseeing the work of Poway's Public Works Director Mike Obermiller, who did not account for the amount of water that can flow through the main tributary and into Lake Poway and designed a dirt-backfill stream crossing that will not withstand

storm surges and the amount of water coming through the main tributary during wetter years.

23. As of August 23, 2018, the City of Poway is currently looking to hire a new City Engineer.

24. By law, the City of Poway should have constructed a concrete water measuring structure / engineered bridge combination at the location of its current dirt-backfill stream crossing over the main tributary to fulfill its obligations under the 1968 Water Rights Agreement between Poway and the City of San Diego and to meet State and federal water quality requirements.

25. A 50-year storm event would result in extreme flooding over Poway dam.

26. The amount of water coming through the main tributary of Warren Canyon upstream of Lake Poway during a 50-year storm event would not fit within the recently built culvert crossing as it is currently placed and would lead to another blowout.

27. Considerably less water than a 50-year storm event would cause a blowout of the main tributary culvert crossing because the City realigned the stream from its historical placement and placed dirt-fill and dredged materials in the historical part of the stream bed in 2017 and in previous years without the appropriate Clean Water Act permits.

28. The effluent coming off the City of Poway's rebuilt earthen crossings, as well as the placement of mobile pollutants in Warren Creek by private third party landowners in Warren Canyon, have and will cause pollution in Lake Poway seasonally during most rainy seasons, which will lessen its storage and flood-control capacity over time.

29. The City of Poway has failed to obtain *individualized* water quality certifications from the State of California and the San Diego Water Board for its stream crossings in several locations above Lake Poway.

30. In 2017, Lake Poway had a higher average numeric turbidity level than in 2016 and, unlike other years, had a higher average numeric turbidity level than allowed by state law for drinking water, based on measurements taken from the public water supply intake. The higher turbidity levels were caused by sedimentation from the proximal blown-out stream crossings and the resulting polluted storm and non-storm water that flowed into the reservoir.

31. Under the Clean Water Act, the City of Poway is responsible for ensuring that pollution from its point

sources do not lead to the loss of the beneficial uses of Lake Poway. However, the City has not obtained the proper Clean Water Act permits and individual water quality certifications for its maintenance and construction activities in the Lake Poway area, and it has not been adhering to the NDPES permit that it has procured for its storm and non-storm water point-source discharges in its main stormwater sewer system (MS4) feeding the reservoir by implementing effective controls to reduce future pollution.

32. The City of Poway has done nothing to reduce or eliminate past or future non-storm water discharges of pollutants into Lake Poway. In 2017, a significant amount of non-storm water – i.e. natural spring water flowing from both Mount Woodson and Rock Haven that is funneled into Warren Creek – became contaminated with mobile pollutants including sedimentation from failed culvert with dirt-backfill crossings owned by the City of Poway as well as several private residences of Warren Canyon.

33. This polluted storm and non-storm water was discharged through a major outfall point source (the wooden footbridge over Boulder Bay) and entered Lake Poway – the receiving body of water and waters of the United States – at pollution levels far above the City's NPDES non-storm water action levels (NALs) for turbidity and other pollutants.

34. History will repeat itself because the City of Poway and some private landowners in Warren Canyon have replaced unpermitted fill and dredged materials – mobile pollutants – back in the main tributary feeding Lake Poway.

35. The non-storm spring water flows into Lake Poway from two sources: Rock Haven Spring, which is on City-owned land (APN: 278-210-1100) and Kelly Spring, which is on land that Complainant owns (APN: 278-210-1800). Before the water from Kelly Spring discharges into the City of Poway's MS4, through a major outfall point source, and into the receiving water (Lake Poway), the spring water has become and becomes contaminated with sedimentation pollution and other mobile pollutants from different point-source locations in the privately owned portion of Warren Canyon.

36. Unless a non-storm water discharge is identified as a discharge authorized by a separate NPDES permit, the San Diego Regional MS4 permit requires the City of Poway to reduce or eliminate non-

storm water discharges from springs and rising ground waters into its MS4 where feasible and priorities and resources allow. 2013 MS4 Permit, Provision E.2.a.(7).

37. This reduction or elimination of a non-storm water discharge from a spring is required to be implemented not only if the non-storm water discharge is uncontaminated but even more so when the non-storm water is contaminated from pollutants before being discharged into the City's MS4. The policy goal of this requirement is to ensure that the municipality is doing all it can to preserve and save precious water resources.

38. From 1972 when Poway dam was built to today, over 20,000 tons of sediment have entered Lake Poway from Warren Creek.

39. Complainant has proposed a feasible way to considerably reduce the non-storm water discharges to the City's MS4 and Lake Poway – i.e. the spring water and rising ground waters emanating from both Rock Haven and Mount Woodson – through wetland repairs and stream rehabilitation projects on APN: 278-210-1800 in the City of Poway that have been designed by a qualified surface water engineer. The City of Poway refuses to undertake such projects, which would fulfill its Regional MS4 permit requirement, Provision E.2.a.(7) by filtering out pollutants from surface water, create new wetlands, and recharge underground aquifers through increased capture and infiltration of lowflow spring water runoff.

40. The City of Poway has failed to address and effectively prohibit non-storm water pollution through implementing a required enforcement program designed to bring private landowners in the watershed area feeding Lake Poway – i.e. Warren Canyon – into compliance with the various Clean Water Act permits and requirements.

41. MS4 operators like the City of Poway cannot passively receive and discharge pollutants from third parties, whether in storm water or non-storm water discharges.

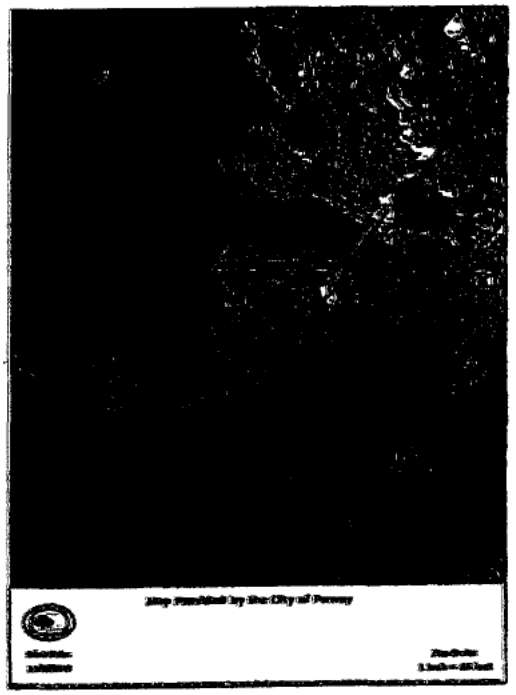
42. The City's discharges and third-party discharges from its MS4 have caused, have contributed to, and have threatened to cause sedimentation pollution, as well as excess turbidity and color pollution, in Lake Poway at unreasonable and actionable levels in violation of its NPDES permit.

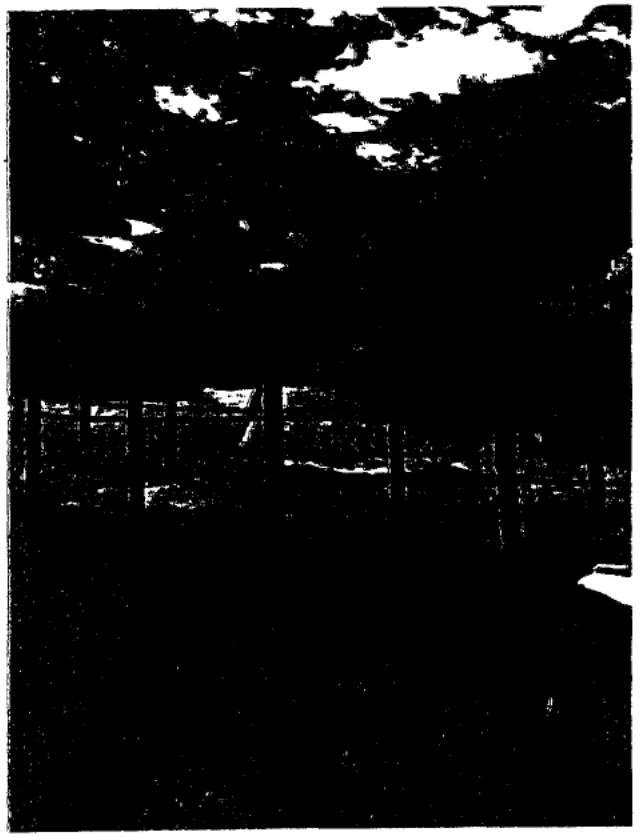
43. In addition to reducing future storm water pollution, the City of Poway must reduce future non-storm

water discharges into its MS4 and into Lake Poway through effective law enforcement and through effective controls and other best management practices (BMPs) to fulfill its current Regional MS4 permit; otherwise, it must ensure that separate NPDES permits are obtained for the non-storm water discharges to its MS4 and to Lake Poway that will occur on a seasonal basis.

44. The City of Poway must implement effective controls and BMPs to segregate perennial flows of spring water from non-point source and point-source pollutants before they are discharged into Warren Creek and into the City's MS4.

45. The non-storm spring water emanating from Mount Woodson is first discharged into the City-owned MS4 starting at APN: 278-290-1000 and continuing on into APN: 278-280-2300, which contains the City-owned point-source culvert crossing over Warren Creek. The non-storm spring water is then discharged through a major outfall point source that drains over 1000 acres (a wooden footbridge single conveyance in Warren Creek which straddles APN: 278-280-2300 and APNs: 2782810100 and 7601590500 (14692 and 14656 Lake Poway Road, Poway, California 92064, Latitude 33.0039, Longitude -117.0069) 46. The wooden footbridge is a major outfall as defined by the federal regulations that discharges into adjacent wetlands and the surface waters of the Boulder Bay area of Lake Poway. The pictures below show the wooden footbridge in 2005, 2009, and 2018.





ATTACHMENT A

46. By the time the non-storm spring water is discharged into the City-owned MS4, it has gathered a considerable amount of pollutants from point sources and non-point sources on private property.

47. The City has failed to prepare and implement a storm water pollution prevention plan and water quality improvement plans for the watershed area above Lake Poway and has failed to implement pollution control technologies and other best management practices to prevent past and future impure storm water and non-storm water discharges and sediment plumes into Lake Poway.

48. The City has failed to identify the major outfall in its MS4 immediately above Lake Poway (the wooden footbridge single conveyance over Warren Creek and Boulder Bay) and the accompanying wet and dry weather monitoring and reporting requirements that must be done on an annual basis and shown to the San Diego Water Board.

49. The City of Poway has failed to report its non-storm water discharges, its lack of best management practices, and the resulting prohibited and uncontrolled pollution into Lake Poway in its Report of Waste Discharge required for its Regional MS4 permit renewal and in other reports as required by its current Regional MS4 permit.

50. The City of Poway has identified through the public record the fact that spring water from Rock Haven flows in its MS4 and reaches Lake Poway and that storm water and non-storm water flows from Warren Creek contributed to sedimentation pollution into Lake Poway in 2017.

51. The City of Poway has acknowledged in the public record that MS4 pollution has nearly buried its wooden footbridge in Boulder Bay with course sediment, which only a few years ago was floating above the waters of Lake Poway.

52. To rectify the degradation of beneficial uses of Lake Poway, the Regional MS4 permit requires the City of Poway to either prohibit the non-storm water discharges or propose controls to be implemented for the category of non-storm water discharges as part of the Water Quality Improvement Plan and then implement those controls. 2013 MS4 Permit, Provision E.2.a.(6).

53. One of the policy goals of the Clean Water Act is to capture stormwater and non-storm water efficiently and effectively after storm surges to lessen the City's reliance on imported water. For the portion of the City of Poway that lies within the San Dieguito watershed, the most effective method of

accomplishing this goal is through stream rehabilitation projects at the source of the water. The City of Poway refuses to undertake such projects as mitigation for its harms to the environment and public water supply, which are federally and state mandated.

54. Moreover, following the destruction of its trail system into waters of the United States and reconstruction of its new earthen stream crossings, the City of Poway has failed to adhere to its Habitat Conservation Plan's mitigation requirements by properly accounting for its developmental impacts to waters of the state and United States through the actual preservation of additional biological resources including restoration and preservation of additional stream and wetland acreage of equivalent type and quality at the appropriate mitigation ratio.

55. The City of Poway does not value wetlands with its current policies and procedures; rather, "[t]he City is trying to remove the 'water of the U.S.' classification" for Lake Poway so that it does not have to comply with any part of the Clean Water Act. Foth-CLE Engineering Group, Geophysical Survey of Lake Poway, at 33 n.4, June 7, 2018.

56. On top of all that, the City of Poway has constructed and maintained unauthorized hiking trails on Complainant's private property in the watershed area above Lake Poway. Through its construction and maintenance activities on private property, the City has violated state trespassing laws as well as the Clean Water Act and the Endangered Species Act as the unpermitted trails cross a blue-line stream feeding Lake Poway and contain endangered plant and animal species on the trails and in the vicinity.

II. PARTIES

A. Complainant

57. Complainant is a taxpaying citizen of Poway and owns 43 acres of key watershed land that contain streams and springs feeding Lake Poway (APNs 278-210-1800, 278-210-3000, 278-210-2900, 278-210-0300, and 278-210-0400).

58. Since November 2016, Complainant has enjoyed the waters of Lake Poway.

59. As a recreational user of the City's reservoir and the surrounding natural environment, he has hiked around, boated in, and fished in the Boulder Bay area and other areas of Lake Poway with his family and hopes to continue to do so in the future without the seasonal intermittent plumes of sedimentation

and other pollutants gradually filling in Lake Poway over time.

60. He has a passion for protecting wetlands including the wetlands in, adjacent to, and above Lake Poway and enhancing the human use and enjoyment of those natural resources.

61. It is Complainant's position that Lake Poway is Waters of the United States as defined by federal law and that the City of Poway's Regional storm water and non-storm water permit (2013 Regional MS4 Permit) is enforceable in the sub-watershed area above Lake Poway, even under Justice Scalia's plurality opinion in Rapanos v. United States, 547 U.S. 715 (2006).

62. As owner of the spring (Kelly Spring near the base of Mount Woodson on APN: 278-210-1800) that contributes the largest amount of non-storm spring water into Lake Poway on a seasonable basis, Complainant wants to work with the City of Poway and the San Diego Water Board to find the best solution to reduce and segregate the non-storm water from the City's MS4 through stream rehabilitation projects that will create new wetlands and recharge the underground aquifers and will improve the water quality of Lake Poway and the San Dieguito watershed in general.

63. The water from Kelly Spring eventually is discharged into the city-owned MS4 at APN: 278-290-1000, the City of Poway's open space resource management area, and through a major outfall and into Lake Poway at APN: 278-280-2300, and has become polluted in the past from various unpermitted point-source culvert crossings and other illegal connections and discharges placed in Warren Creek by private landowners before being discharged as contaminated non-storm water into the City's MS4 and into Lake Poway.

B. Complainee

64. The City of Poway is a California General Law City and municipal corporation, duly organized and existing by virtue of the laws of the State of California and the charter of the City of Poway.

65. The City of Poway operates a modern water collection, treatment, and distribution system.

66. The City of Poway owns Lake Poway, which is one source of the City's drinking water supply, and owns portions of the area upstream of Lake Poway including APNs 278-280-2300; APN 278-281-0100; APN: 278-290-1000; and APN: 278-210-1100.

67. The City's parcel, APN: 278-210-1100, contains locally known Rock Haven Spring, a significant

source of non-storm spring water that flows first through the City of Poway's MS4 and then through Complainant's private property (APN: 278-210-1800) before reentering the City's MS4 by Lake Poway on APN: 278-290-1000.

68. The City's parcels contain point sources and non-point sources that have caused and will cause sedimentation pollution into Lake Poway.

69. By law, the City of Poway also has enforcement authority over the residents of Warren Canyon and their point sources that are placed within their privately owned portions of Warren Creek because the creek is interrelated and becomes part of a municipal conveyance system downstream.

70. City-owned Lake Poway is a year-round navigable-in-fact waterbody and is considered waters of the United States because it has been used in interstate commerce and because water from the reservoir has reached and will reach the Pacific Ocean 17 miles away during a 25-year storm event and/or after mandated water releases from an outlet pipe.

71. The City of Poway is seeking to devalue the wetlands that Complainant owns above Lake Poway by disingenuously arguing that Warren Creek is merely an "ephemeral" tributary and that Lake Poway is a "terminal reservoir" and not Waters of the United States according to Justice Scalia's plurality opinion in Rapanos v. United States, 547 U.S. 715 (2006).

III. STATUTORY BACKGROUND

72. The federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.) of 1972 is the basic federal law that addresses surface water quality control and protection of beneficial uses of water. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters through prevention, reduction, and elimination of pollution. The CWA applies to discharges of pollutants into waters of the United States.

73. The term waters of the United States means: All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or

destruction of which could affect interstate or foreign commerce including any such waters: a. which are could be used by interstate or foreign travelers for recreational or other purposes; or b. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or c. which are used or could be used for industrial purposes by industries in interstate commerce. 4. All impoundments of waters otherwise defined as waters of the United States under this definition; 5. Tributaries of waters identified in paragraphs (1) through (4) or this section; 6. The territorial sea; 7. Wetlands adjacent to waters. 40 C.F.R. § 230.3(s) (1986, 1988).

74. Section 301 of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant in waters of the United States by any person except in compliance with a National Pollutant Elimination System (NPDES) permit issued under Section 402 of the CWA, 33 U.S.C. § 1342, or a Department of the Army Permit for dredged or fill material at specified sites issued under Section 404 of the CWA, 33 U.S.C. § 1344.

75. Section 502(5) of the CWA, 33 U.S.C. § 1362(5), defines "person" to mean an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.

76. Section 502(6) of the CWA, 33 U.S.C. § 1362(6), defines "pollutant" to mean dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological material, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

77. Section 502(12)(A) of the CWA, 33 U.S.C. § 1362(12)(A), defines the term "discharge of pollutants" to mean any addition of any pollutant to navigable waters from any point source.

78. Section 502(7) of the CWA, 33 U.S.C. § 1362(7), defines "navigable waters" as "the waters of the United States, including territorial seas." EPA's implementing regulations at 40 C.F.R. § 122.2 (February 7, 2018) further define "waters of the United States" to include, inter alia, adjacent lakes and tributaries adjacent to navigable waters. "A water that otherwise qualifies as a tributary under this definition does not lose its states as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands

along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water make can be identified upstream of the break." The Supreme Court has also opined that a wetland must have an impact on the quality of a downstream navigable-in-fact water to fall under the jurisdiction of the CWA (known as the "significant nexus" test). Rapanos v. U.S., 547 U.S. 715, 759 (2006) (Kennedy, J., concurring); see In re Smith Farm Enterprises, LLC, CWA Appeal No. 08-02 (EAB, March 16, 2011), slip op. at 28-30. Justice Scalia in his plurality opinion opined that the wetlands in question must in fact be adjacent to waters of the United States. Rapanos, 547 U.S. at 740.

79. Section 502(14) of the CWA, 33 U.S.C. § 1362(14), defines "point source" to mean any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel, or other floating craft, from which pollutants are or may be discharged.

80. "The stormwater discharges came from point sources, because they flowed out of artificial 'pipe[s],' 'ditche[es],' and 'channel[s],' 33 U.S.C. § 1362(14)." Decker v. Northwest Environmental Defense Center, 568 U.S. 597, 623 (Scalia, J., concurring in part and dissenting in part).

81. Water from a spring also discharges from a point source by definition in the City of Poway's Regional MS4 Permit.

82. A point source also includes the dredged and fill materials placed around the culverts inside waters of the United States by machines such as back hoes. "[T]he definition of a point source is to be broadly interpreted," and courts have uniformly held that earth-moving equipment, such as dump trucks, bulldozers, excavators, plowing equipment, back hoes, and related heavy machinery, are all point sources. See, e.g., Peconic Baykeeper, Inc. v. Suffolk County, 600 F.3d 180, 188 (2d Cir. 2010); Concerned Area Residents for the Environment v. Southview Farm, 34 F.3d 114, 118 (2d Cir. 1994); Avoyelles Sportmen's League v. Marsh, 715 F.2d 897, 922 (5th Cir. 1983).

83. Section 402(p) of the CWA, 33 U.S.C. § 1342(p), requires NPDES permits for certain municipal storm water discharges. EPA promulgated regulations at 40 C.F.R. § 122.26 (December 21, 2015) to implement the storm water permit provisions of Section 402(p).

84. "Storm Water" is defined as "storm water runoff, snow melt runoff, and surface runoff and drainage." 40 C.F.R. § 122.26(b)(13).

85. Non-storm water discharge is any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

86. NPDES permits are required for discharges of storm water from a "municipal separate storm sewer system (MS4) [which] means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains)" owned by a city and designed for conveying storm water. 40 C.F.R. § 122.26(b)(8). An MS4 conveys only untreated storm water. See 40 C.F.R. § 122.26(a)(7).

87. Generally, the CWA requires point source discharges, including dischargers of storm water associated with maintenance or construction activity, to comply strictly with water quality standards. 33 U.S.C. § 1311(b)(1)(C).

88. CWA section 402(p) requires the EPA or authorized state to issue NPDES permits for storm water discharges from MS4s to waters of the United States. CWA section 402(p)(3)(iii) requires that NPDES permits for storm water discharges from MS4s to "require controls to reduce the discharge of pollutants [in storm water] to the maximum extent practicable [MEP], including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or State determines appropriate for the control of such pollutants." 33 U.S.C. § 1342(p).

89. Section 402(b) of the CWA, 33 U.S.C. § 1342(b) authorizes States with an EPA-approved NPDES program to issue NPDES permits. The State of California, through its State Water Resources Control Board (SWRCB) and Regional Water Boards, is a state approved under section 402(b) of the CWA to administer the NPDES program, including the issuance of storm water permits within California.

90. Under 40 CFR § 122.26(b)(2), an illicit discharge is defined as "any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NDPES permit for discharges from the municipal separate storm sewer). This

implementing regulation requires a separate NPDES permit for uncontrolled polluted non-storm water discharged into and from a MS4 other than the MS4 permit for storm water.

91. As required by Section 402(p)(3)(B)(ii) of the Clean Water Act, cities are required to "effectively prohibit non-storm water discharges into the MS4 and watercourses, except where such discharges" are covered by a separate NPDES permit or fall within one of thirteen categories of flows that are conditionally exempted from the discharge prohibition such as natural flow from springs and rising ground waters. These non-storm water flows may be exempted so long as: (i) they are not a source of pollutants to receiving waters and (ii) they do not violate antidegradation policies.

92. "[M]unicipalities will not be held responsible for prohibiting some specific components of discharges or flows . . . through their municipal separate storm sewer system, even though such components may be considered non-storm water discharges, unless such discharges are specifically identified on a case-by-case basis as needing to be addressed." 55 Fed. Reg. 47995 (16 November 1990).

93. "EPA disagrees that [water from springs and rising ground water] will not pose, in every case, significant environmental problems." 55 Fed. Reg. 48037 (16 November 1990).

94. 40 CFR § 122.26(d)(2)(iv)(B)(1) states that the proposed management program required in a MS4 permit shall include: An enforcement program "to prevent illicit discharges to the municipal separate storm sewer system."

95. The program description shall address the following categories of non-storm water discharges or flows only where such discharges are identified by the municipality as sources of pollutants to waters of the United States: ... rising ground waters, . . . springs . . . ." 55 Fed. Reg. 48037 (16 November 1990).

96. "The CWA prohibits the point source discharge of non-storm water not subject to an NPDES permit through municipal separate storm sewers to waters of the United States." 55 Fed. Reg. 47996 (16 November 1990).

97. Section 404(a) of the Clean Water Act, 33 U.S.C. § 1344(a), establishes an Army Corps-administered permit program for the discharge of dredged or fill material at specified sites into waters of the United States.

98. Section 404 requirements are distinct from, and in addition to, the NPDES permit framework in Section 402, 33 U.S.C. § 1342.

99. Section 404(a) of the CWA, 33 U.S.C. § 1344(a), prohibits the "discharge of a pollutant" into waters of the United States, except in compliance with a permit issued pursuant to the provisions in the Act.

100. The Act broadly defines the term "pollutant" to include dredged spoil, rock, sand, and waste discharged into water. 33 U.S.C. § 1362(6).

101. The "discharge of fill material" is defined as "the addition of fill material into waters of the United States," including, but not limited to, infrastructure construction fill, causeway or road fills, and "site development fills for recreational, industrial, commercial, residential, or other uses." 33 C.F.R. § 323.2(f) (December 30, 2008).

102. "Fill material" refers to material that replaces aquatic area with dry land or changing the bottom elevation of a waterbody. 33 U.S.C. § 323.2(e)(1).

103. "Dredged material" means "material that is excavated or dredged from waters of the United States." 33 C.F.R. § 323.2(c).

104. Activities in waters of the U.S. that are regulated under the Section 404 program include fills for development, water resource projects, and infrastructure development (such as unpaved roads) that are placed in waters of the United States.

105. The Army Corps of Engineers has authority to issue individual permits or "general permits on a state, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material" (both known as a "Section 404 Permit"). 33 U.S.C. § 1344(e)(1).

106. Under CWA Section 404(e), the Army Corps of Engineers (USACE) can issue general permits to authorize activities that have minimal individual and cumulative adverse environmental effects. General permits can be issued for a period of no more than 5 years. USACE can issue nationwide permits, which is a general permit that authorizes activities across the country, unless revoked by a district or division commander. Nationwide permits authorize a wide variety of activities such as linear transportation projects, residential development, commercial and industrial

developments, utility lines, road crossings, bank stabilization activities, wetland and stream restoration activities, and certain maintenance activities.

107. Regional permits are a type of general permit issued by a Division or District Engineer that may require case-by-case reporting and acknowledgement. 33 C.F.R. § 325.5(c)(1) (August 30, 2018).

108. An individual or standard permit is required when a project cannot meet all of the conditions of a general permit and has more than minimal individual or cumulative impacts. These types of projects are evaluated using additional environmental criteria and involve a more comprehensive public interest review. 33 C.F.R. § 325.5(b) (October 25, 2018).

109. Section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), requires that any application to the Army Corps for a Section 404 permit must include a "certification from the State in which the discharge originated or will originate . . . that any . . . discharge will comply with [other sections of the Clean Water Act]."

110. Before the Army Corps can issue a Section 404 permit, the state must certify the project is compliant with local Basin Plans and water quality objectives. 33 U.S.C. § 1341(a)(1).

111. This certification from the state is known as a Section 401 Certification.

112. Section 404 permits rely upon, and are required to, incorporate any conditions imposed by a state's water quality certification. 33 U.S.C. § 1341(a)(1).

113. The Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq.) was passed in 1973 to provide a legal mechanism for the conservation of endangered and threatened species and the ecosystems upon which they depend. With limited exceptions, the ESA places restrictions on a range of activities involving endangered and threatened animals and plants to help ensure their continued survival. With limited exceptions, the prohibited activities may not be carried out unless authorized by a permit from the U.S. Fish and Wildlife Service. Sections 7 and 9 of the ESA allow "incidental" takes of threatened and endangered species, but only in accordance with a permit and a corresponding Habitat Conservation Plan.

114. It is unlawful to commit, to attempt to commit, to cause to be committed or to solicit another to commit the following: Remove, cut, dig up, damage, or destroy a federally listed endangered plant

on private property in violation of any law or regulation of any state including a state criminal trespass law. 16 U.S.C. § 1538(a)(2)(B).

115. With respect to any endangered species of wildlife, it is unlawful to take any such species within the United States without a permit. 16 U.S.C. § 1538(a)(1)(B).

116. The Clean Water Act allows for citizen enforcement of the Clean Water Act against a municipality which is alleged to be in violation of an effluent standard or limitation under the Act or with an order issued by the Administrator or State with respect to a standard or limitation. Civil penalties, declaratory relief, injunctive relief, and litigation costs may be awarded. All violations of separate Clean Water Act requirements or permit conditions are separately subject to penalty assessment on each and every day such violations continue. For the purposes of Section 402 of the CWA, each discharge in excess of an NPDES limitation constitutes a separate violation. For purposes of Section 404 of the CWA, a day of violation may either be a day that actual discharge or dredged or fill material takes place, or may also include any day that such dredged or fill material is allowed to remain in waters or wetlands. Civil liability under the CWA is not limited to intentional violations. 33 U.S.C. § 1319; 33 U.S.C. § 1365.

117. A private cause of action is available for citizens under 33 U.S.C. § 1365 to file a civil action against any person "who is alleged to be in violation of ... an effluent standard or limitation . . ." Id. at § 1365(a)(1). Section 1365(f) defines "effluent standard or limitation" as "an unlawful act under subsection (a) of section 1311, . . . certification under section 1341, . . . and a permit or condition issued under section 1342 of this title." Id. at § 1365(f).

118. A term or condition in a permit issued under CWA §§ 401, 402, or 404 is an "effluent standard or limitation" that can be enforced by way of a citizen suit under 33 U.S.C. § 1365.

119. The Endangered Species Act allows for citizen enforcement of the ESA to enjoin any person who is alleged to be in violation of any provision of the ESA. Injunctive relief and costs of litigation may be ordered by a federal judge. 16 U.S.C. § 1540(g).

IV. **City of Poway's NPDES Permit Requirements**

120. The San Diego Water Board issued to the City of Poway the National Pollutant Discharge Elimination System ("NPDES") Permit and Waste Discharge Requirements, No. R9-2013-0001, as amended by Order No. R9-2015-0001 and R9-2015-0100, NPDES No. CAS0109266 (the "2013 MS4 Permit").

121. Permit Provision A prohibits unauthorized discharges from the City of Poway's properties, facilities, activities, MS4s and other rights of way, including:

a. Provision A.1.a provides: "Discharges from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters of the state are prohibited."

i. The term "pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: the waters for beneficial uses; or facilities which serve those beneficial uses. "Beneficial uses" of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

ii. The term "receiving waters" includes creeks, streams, rivers, lakes, wetlands, reservoirs, estuaries, bays, and the ocean.

iii. "Discharges" means addition of pollutants to navigable waters from any point source.

b. Provision A.1.b provides: "Non-storm water discharges into MS4s are to be effectively prohibited, through the implementation of Provision E.2, unless such discharges are authorized by a separate NPDES permit."

c. Provision A.1.c further provides: "Discharges from MS4s are subject to all waste discharge prohibitions in the Basin Plan."

d. Provision A.2.a provides: "Discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving waters."

i. Attachment F provides: "The receiving water limitations included in this Order consist of all applicable numeric or narrative water quality objects or criteria, for receiving waters as contained in the Basin Plan . . . or in federal regulations."

e. Provision A.4 provides: "Each Copermittee must achieve compliance with Provisions A.1.a, A.1.c and A.2.a through timely implementation of control measures."

i. Attachment F provides: "[C]ompliance with the Provision A.4 does not shield a Copermittee who may have violated Provision A.1a, A.1.c, or A.2.a from an enforcement action."

ii. Attachment F further provides: "The Ninth Circuit held in Natural Resources Defense Council v. County of Los Angeles (2011) 673 F.3d 880, 886 (revd. on other grounds and remanded by Los Angeles County Flood Control District v. Natural Resources Defense Council (133 S. Ct. 710 (2013))) that engagement in the iterative process does not provide a safe harbor from liability for violations of permit terms prohibiting exceedances of water quality standards. The Ninth Circuit holding is consistent with the position of the State and Regional Water Boards that exceedances of water quality standards in an MS4 permit constitute violations of permit terms subject to enforcement by the Water Boards or through a citizen suit. While the Water Boards have generally directed dischargers to achieve compliance by improving control measures through the iterative process, the San Diego Water Board retains the discretion to take other appropriate enforcement and the iterative process does not shield dischargers from citizen suits under the CWA.

iii. The requirements of Provision A.4, therefore, are required to be implemented until the water quality standards expressed under Provisions A.1.a, A.1.c, and A.2.a are achieved.

iv. Part of the "controls" required by the Order is the process described in Provision A.4. Provision A.4 includes the process that is ultimately expected to achieve compliance with the requirement that discharges from the MS4 do not cause or contribute to

violations of water quality standards in the receiving waters. The implementation of Provision A.4 is required when the Copermittees or the San Diego Water Board have determined that discharges from the MS4 are causing or contributing to violations of water quality standards in the receiving waters."

122. The San Diego Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. The Order requires the Copermittees to meet best practicable treatment or control to meet water quality standards. As required by 40 CFR 122.44(a), the Copermittees must comply with "maximum extent practicable" technology-based standards set forth in CWA section 402(p) for discharges of pollutants in storm water from the MS4s.

a. Pursuant to 40 CFR 122.26(d)(2)(iv), each Copermittee is required to implement a "management program . . . to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and other such provisions which are appropriate."

b. MS4s regulated to the MEP standard achieve the standard by storm water management plans that implement best management practices in a narrative form, not a numeric form. There are no numeric baseline criteria in the MEP standard like there are in the TBELs in §1311. Therefore, the MS4 permitting process has no numeric mandates. Therefore, water quality standards (WQS) are the only baseline that exists within the MEP standard.

c. WQS's are the only way to "control [] such pollutants" from municipal storm water because without a concrete standard, there is no measure of control.

123. NPDES Permit No. CAS0109266, Attachment F describes: "Although sediment is naturally occurring in the natural environment, the discharge of sediment under unnatural conditions is problematic to receiving waters. Fine sediment in creeks causes high turbidity that interferes with the functionality of native flora and fauna in local creeks. For example, turbidity interferes with both photosynthesis of water-philic plants, as well as successful foraging and reproduction of benthic macroinvertebrates. Sediment can also make it difficult for fish to breathe because it clogs fish gills. Other pollutants such as heavy metals or pesticides can adhere to sediment and are transported to

receiving waters during storm events, where they dissolve in the water column and become bioavailable to aquatic organisms. Sediment is recognized as a major stressor to surface waters . . ."

a. Attachment F further describes: "The San Diego Water Board identified, through investigations and complaints, sediment discharges from unpaved roads as a significant source of water quality problems in the San Diego Region. Inspection activities conducted by the San Diego Water Board since the Third Term Permits have found a lack of source control for many unpaved roads within the jurisdiction of the Copermittees. Unpaved roads are a source of sediment that can be discharged in runoff to receiving waters, especially during storm events. Erosion of unpaved roads occurs when soil particles are loosened and carried away from the roadway base, ditch or road bank by water, wind, traffic, or other transport means. Exposed soils, high runoff velocities and volumes, sandy or silty soil types, and poor compaction increase the potential for erosion. Road construction, culvert installation, and other maintenance activities can disturb the soil and drainage patterns to streams in undeveloped areas, causing excess runoff and thereby erosion and the release of sediment. Poorly designed unpaved roads can act as preferential drainage pathways that carry runoff and sediment into natural streams, impacting water quality. In addition, other public works activities along unpaved roads have the potential to significantly affect sediment discharge and transport within streams and other waterways, which can degrade the beneficial uses of those waterways.

b. The EPA also recognizes that discharges from unpaved roads pose a significant potential threat to water quality. EPA guidance emphasizes the threat of unpaved roads to water quality: "Dirt and gravel roads are a major potential source of these pollutants [sediment] and pollutants that bind to sediment such as oils, nutrients, pesticides, herbicides, and other toxic substances. Many roads have unstable surfaces and bases. Roads act like dams, concentrating flows that accelerate erosion of road materials and roadsides. Both unstable surfaces and accelerated erosion then lead to sediment and dust."

124. Non-storm water (dry weather) discharges from the MS4 are not considered storm water (wet weather) discharges and therefore not subject to the MEP standard. Non-storm-water discharges must be reduced and effectively prohibited whee the non-storm water is a source of pollutants to the MS4 through effective controls.

125. The Copermittees are required to reduce or eliminate non-storm water discharges such as water from springs and rising ground waters to the MS4, even when those non-storm water discharges are uncontaminated, to further the San Diego Water Board's policy of enhancing local water supplies. 2013 MS4 Permit, Provision E.2.a.(7).

126. Pure spring water discharged into the MS4 is considered a conditionally exempt category of non-stormwater. However, spring water that has accumulated excess sedimentation directly from third parties' point sources and/or from a municipality's point sources is considered polluted non-stormwater (anthropogenically caused) and is not subject to the MEP standard but must meet a much more stringent test. Such discharges from the MS4 into receiving waters are to be effectively prohibited and are to be treated as illicit discharges unless effective controls and other best management practices (BMPs) are put into place to reduce the non-storm water discharges to acceptable levels.

i. Provision C includes requirements for the Copermittees to identify and include numeric action levels in the Water Quality Improvement Plan to direct and focus the Copermittees' jurisdictional runoff management program implementation efforts for controlling MS4 discharges to receiving waters.

ii. Under Provision C, the numeric action levels required are for non-storm water discharges and storm-water discharges. The non-storm water action levels (NALs) are applicable to non-storm water discharges from the Copermittees' MS4, which can occur year-round. The storm water action levels (SALs) are applicable to storm water discharges from the Copermittees' MS4s, which occur during the rainy season defined as the period between October 1 and April 30.

1. The numeric non-storm water action level for turbidity is 20 NTU, which is a maximum daily action level.
2. The numeric non-storm water action level for fecal coliform is 200 MPN/100 ml as an average monthly action level and 400 MPN/100 ml as an instantaneous maximum.
3. The numeric storm-water action level for turbidity is 126 NTU.

iii. The action levels of Provision C are to be used by the Copermittees to prioritize the actions to be implemented as part of the Water Quality Improvement Plan.

iv. If there are non-storm water discharges that are not required to be addressed as illicit discharges, those discharges must comply, at a minimum, with the discharge prohibitions and receiving water limitations of Provision A. Thus, the non-storm water discharges from the MS4 must be at levels that will not cause or contribute to a condition of pollution, contamination, or nuisance (provision A.1.a), and must not cause or contribute to a violation of water quality standards in receiving waters (Provision A2.a) to be consistent with the discharge prohibitions and receiving water limitations of Provisions A.1.a and A.2.a.

v. Exceedances of NALs would then provide an indication of the relative severity of a pollutant in non-storm water discharges from the MS4 contributing to potential or observed receiving water impacts. The relative severity or significance of a pollutant in non-storm water discharges from the MS4 will provide the Copermittees a valuable source of information that can be used to identify priority water quality conditions within a Watershed Management Area and within each Copermittee's jurisdiction.

vi. Non-storm water discharges are not authorized to enter the MS4 and are considered to be illicit discharges, unless authorized by a separate NPDES permit.

1. Consistent with federal law, unless non-storm water discharges to the MS4 are authorized by a separate NPDES permit, non-storm water discharges are appropriately subject to the effective prohibition requirement in the CWA and

Regional Water Boards are not limited by the iterative MEP approach to storm water regulation in crafting appropriate regulations for non-storm water discharges.

2. The federal regulations (40 CFR 122.26(d)(2)(vi)(B)(1)) require the Copermittees to "implement and enforce an ordinance, order or similar means" to address and prevent polluted non-storm water discharges to their MS4s. Thus, the Co-permittees are required to "effectively" prohibit polluted non-storm water discharges to their MS4s through enforcing their legal authority established under "ordinance, order, or similar means" and either remove those discharges to their MS4s, put controls in place approved by the San Diego Water Board to reduce the non-storm water discharges, or else require those discharges to obtain coverage under a separate NPDES permit.
3. Non-storm water discharges (dry weather) from the MS4 are not considered storm water (wet weather) discharges and therefore are not subject to the MEP standard.
4. The Copermittees must effectively prohibit non-storm water discharges into the MS4s, reduce the discharge of pollutants in storm water from the MS4s to the MEP, and ensure that their MS4 discharges do not cause or contribute to violations of water quality standards.
5. If the Copermittees have effectively prohibited non-storm water discharges and reduced storm water pollutant discharges to the MEP, but their discharges are still causing or contributing to violations of water quality standards, Provision A.4 provides a clear "iterative process" for the Copermittees to follow. Provision A.4 essentially require the Copermittees to implement additional BMPs until MS4 discharges no longer cause or contribute to a violation of water quality standards.

6. The federal NPDES regulations also reference several categories of non-storm water discharges or flows [which] shall be addressed where such discharges are identified . . . as sources of pollutants to waters of the United States."

7. The federal NDPES regulations do state that specific categories of non-storm water discharges must be "addressed" if identified as "sources of pollutants to waters of the United States."

8. Provision E.2.a of the City's NPDES permit requires each Copermittee to address all types of non-storm water discharges into its MS4 as illicit discharges, unless the discharge is authorized by a separate NPDES permit, or identified as a category of non-storm water discharges or flows that must be addressed pursuant to Provision E.2.a. Only non-NPDES-permitted non-storm water discharges identified as a category of non-storm water discharges under Provisions E.2.a.(1) though E.2.a.(5) AND not identified as a source of pollutants do not have to be addressed as illicit discharges.

9. Each Copermittee must, where feasible and priorities and resources allow, reduce or eliminate non-storm water discharges listed under Provisions E.2.a.(1)-(4) into its MS4, unless a non-storm water discharge is identified as a discharge authorized by a separate NPDES permit. This provision applies to uncontaminated spring water and rising groundwaters under Provision E.2.a.(3).

10. Under Provision E.2.a.(6), if the Copermittee or the San Diego Water Board identifies any category of non-storm water discharges listed under E.2.a.(1)-(4) as a source of pollutants to receiving waters, the category must be prohibited through ordinance, order, or similar means and addressed as an illicit discharge. Alternatively, the Copermittee may propose controls to be implemented for the category of non-storm water discharges as part of the

Water Quality Improvement Plan instead of prohibiting the category of non-storm water discharges, and implement the controls if accepted by the San Diego Water Board as part of the Water Quality Improvement Plan.

11. Consistent with 40 CFR 122.26(d)(2)(iv)(B) and 122.26(d)(2)(iv)(B)(1), each Copermittee must implement a "program . . . to prevent illicit discharges to the municipal storm sewer system" and "detect . . . illicit discharges and improper disposal into the storm sewer," including "other sources of non-storm water." Provision E.2.b requires each Copermittee to identify major outfalls and to implement measures to prevent and detect illicit discharges and connections to its MS4 as part of its illicit discharge detection and elimination program on public and private property within its jurisdiction.

12. Provision E.2.c requires each Copermittee to conduct field screening of its MS4 within its jurisdiction to detect non-storm water and illicit discharges to the MS4.

    (a) Elimination of illicit discharges to the MS4 is consistent with the requirements of 40 CFR 122.26(d)(2)(iv)(B) "to detect and remove ... illicit discharges" that will achieve the CWA requirement for MS4 permits to "effectively prohibit non-storm water discharges into the storm sewers."

    (b) Each Copermittee is responsible for prioritizing its efforts to eliminate non-storm water and illicit discharges or connections to its MS4 based on field screening and monitoring data, NALs, illicit discharge investigation records, and the known or suspected sources. Sources of non-storm water and illicit discharges or connections must be eliminated by enforcing the legal authority established by each Copermittee pursuant to Provision E.1.

13. Provision E.2.d. requires the Copermittee to categorize a reoccurring non-storm water discharge from springs that exceeds a NAL as either a set of circumstances that will be addressed through its Enforcement Response Plan pursuant to E.6 or the category of discharge must be addressed either through the prohibition of that category of discharge or a reduction of that discharge through effective controls. 2013 MS4 Permit, Provision E.2.a.(6).

14. Provision E.6 requires each Copermittee to develop an Enforcement Response Plan as part of its jurisdictional runoff management program document. Proper implementation of the ERP is necessary to effectively prohibit non-stormwater discharges to the MS4 and reduce the discharge of pollutants in storm water from the MS4 to the MEP.

    (a) The ERP will serve as a reference for the Copermittee and the San Diego Water Board to determine if consistent enforcement actions are being implemented to achieve timely and effective compliance from all public and private entities that are not in compliance with the Copermittee's ordinances, permits, or other requirements.

    (b) The ERP must contain clear direction for the Copermittee to take immediate enforcement action, when appropriate and necessary, in their illicit discharge detection and elimination, construction management, and existing development management programs.

    (c) Violations must be corrected in a timely manner, with escalated enforcement required for non-compliance.

15. Provision E.7 requires each Copermittee to implement a public education and participation program as part of its jurisdictional runoff management program, which will contribute toward effectively prohibiting non-storm

water discharges to the MS4 and toward the reduction of pollutants in storm water from the MS4 to the MEP.

127. The Copermittees must develop and conduct a program to monitor the discharges from the MS4 outfalls in each Watershed Management Area during dry weather and during wet weather. 2013 MS4 Permit, Provision D.2.

a. The Copermittees must conduct MS4 outfall discharge monitoring during implementation of the Water Quality Improvement Plan to assess the effectiveness of their jurisdictional runoff management programs toward effectively prohibiting non-storm water discharges into the MS4 and reducing pollutants in storm water discharges from their MS4s to the MEP.

b. Each Copermittees must identify all major MS4 outfalls that discharge directly to receiving waters.

c. Each Copermittee must perform dry and wet weather field screening monitoring to determine persistent flows and to identify non-storm water and illicit discharges within its jurisdiction and prioritize the dry weather MS4 discharges that will be investigated and eliminated pursuant to Provision E.2.d.

128. The MS4 Permit requires that the City "effectively prohibit" non-storm water discharges into the MS4 through the implementation of a Jurisdictional Runoff Management Plan, unless such discharges are authorized by a separate NPDES permit. 2013 MS4 Permit, Provision A.1.b; 2009 MS4 Permit, Discharge Provision B.1; see also 2013 MS4 Permit, Findings 15.

i. The MS4 Permit requires the City's Jurisdictional Runoff Management Plan to implement "a program to actively detect and eliminate illicit discharges into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit." 2013 MS4 Permit, Provision E.2; see also 40 C.F.R. § 122.26(d)(2)(iv)(b) (Dec. 21, 2015).

ii. An "illicit discharge" is "any discharge to a [MS4] that is not composed entirely of storm water and is not covered by an NPDES permit." 2013 MS4 Permit, Attachment F-39; see also 40 C.F.R. § 122.26(b)(2) (Dec. 21, 2015).

iii. The Illicit Discharge Detection and Elimination program must be implemented in accordance with previously adopted strategies (a water quality improvement plan) and include certain detailed requirements to achieve compliance with non-storm water discharge prohibitions and receiving water limitations. 2013 MS4 Permit, Provision E.2., Provision A.4.

iv. The City's Illicit Discharge Program must include specific measures to prevent and detect illicit discharges to the MS4. These measures include:

1. Including and maintaining an accurate and updated geographic informational system ("GIS") map of its MS4 that, among other requirements, identifies all segments of the MS4 including major outfalls. 2013 MS4 Permit, Provision E.2.b.(1).

2. Using the City's "personnel and contractors to assist in identifying and reporting illicit discharges and connections during their daily employment activities." 2013 MS4 Permit, Provision E.2.b (2).

3. Conducting field screening, including visual observations, of portions of its MS4 to detect non-stormwater and illicit discharges and connections to the MS4. 2013 MS4 Permit, Provision E.2.c; and

4. Including enumerated measures to investigate and eliminate illicit discharges to the MS4. 2013 MS4 Permit, Provision E.2.d.

v. The City is required to prioritize an investigation into non-storm water or illicit discharges when, as here, pollutants identified with those discharges are causing or contributing to receiving water impairments or impacting environmentally sensitive areas within the City. 2013 MS4 Permit, Provision E.2.d(1)(a-b).

vi. When illicit discharges and connections are known to the City, it must use its legal authority to eliminate them. 2013 MS4 Permit, Provision E.2.d (3)(a).

129. In addition to its discharge prohibitions and controls on the City's own activities, the MS4 Permit requires the City to "establish, maintain, and enforce adequate legal authority within its

jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order or similar means." 2013 MS4 Permit, Provision E.1.a; see also 40 C.F.R. § 122.26(d)(2)(vi)(B)(1) (Dec. 21, 2015).

130. As noted above, the MS4 Permit demands that the City maintain adequate legal authority to, at a minimum, "prohibit and eliminate all illicit discharges and illicit connections to the MS4." 2013 MS4 Permit, Provision E.1.a.(1); see also 40 C.F.R. § 122.26(d)(2)(i)(B) (Dec. 21, 2015).

131. The City's legal authority must also control the discharge of spills, dumping, or disposal of materials and other unpermitted fills and mobile pollutants into its MS4. 2013 MS4 Permit, Provision E.1.a. (3).

132. The City's authority must require the use of effective controls and best management practices ("BMPs") to prevent or reduce the discharge of pollutants in storm water from its MS4 to the maximum extent practicable. 2013 MS4 Permit, Provision E.1.a.(7).

133. In addition, the City must have the authority to, at a minimum, ensure compliance with its own regulatory efforts to effectively prohibit non-storm water discharges and either eliminate (or effectively reduce) those discharges to their MS4 or require those non-storm water discharges to its MS4 to have their own separate NPDES permits. 2013 MS4 Permit, Provision E.1.a (9); see also Id., Attachment F at F-40.

134. The MS4 Permit requires that the City submit a statement certifying that it has "taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements in the [MS4 Permit]." 2013 MS4 Permit, Provision E.1.b.

135. The City of Poway has prepared its own Jurisdictional Runoff Management Plan (JRMP) in accordance with its NPDES permit for its MS4.

136. Under 8.2.2 of Poway's JRMP, the City has agreed to maintain unpaved roads and implement BMPs to prevent the transportation of sediment into the storm water conveyance system.

137. In its JRMP, the City also stated that it will take action in accordance with its Enforcement Response Plan to eliminate illicit connections and illicit discharges into, from, and through its MS4 that lead to non-storm water pollution in receiving waters.

138. Provision F includes the requirements for the documents and reports that the Copermittees must prepare and provide to the San Diego Water Board, including Water Quality Improvement Plans, a Jurisdictional Runoff Management Plan, Waste Discharge Reports, and reports of non-storm water discharges as well as illicit discharges and connections.

a. The Copermittee must confirm whether or not a program was implemented during the fiscal year to actively detect and eliminate illicit discharges and connections in accordance with the requirements under Provision E.2.

b. The City is also required to file a Waste Discharge Report containing any illicit discharges to receiving waters and any exceedances of numeric or narrative water quality standards.

c. Illicit connections and illicit discharges and all known non-storm water discharges must be reported to the San Diego Water Board.

V. **CWA Section 404 Department of the Army Permits & CWA Section 401 Water Quality Certifications**

139. Department of the Army Regional General Permit (RGP) Number 63 for Repair and Protection Activities in Emergency Situations authorizes discharges of dredged or fill material into Waters of the United States, including adjacent wetlands, and/or work or structures in and adjacent to navigable waters of the United States for necessary repair and protection measures associated with an emergency situation.

140. An "emergency situation" is present where there is clear, sudden, unexpected, and imminent threat to life or property demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services (i.e., a situation that could potentially result in an unacceptable hazard to life or significant loss of property if corrective action requiring a permit is not undertaken immediately).

141. RGP 63 applies to all of San Diego County.

142. Under RGP 63, discharges of dredged or fill material into Waters of the United States must be avoided or minimized to the maximum extent practicable at the project site. Compensation for unavoidable discharge of fill materials may require appropriate mitigation measures.

143. Under the terms of RGP 63, any work authorized must be the minimum necessary to alleviate the immediate emergency, unless complete reconstruction only results in very minor additional impact to aquatic resources and logistical concerns indicate such reconstruction is as expedient considering the condition of the project site and is limited to in-kind replacement or refurbishment. The RGP may NOT be used to upgrade an existing structure to current standards when that activity would result in additional adverse effects on aquatic resources. Such upgrade projects shall be considered separate activities for which other forms of authorization will be required.

144. Work not described in permit application documentation but deemed necessary after a field assessment is not authorized unless coordinated with the Regulatory project manager and acknowledged by appropriate means. These coordinated permit modifications must also be described in sufficient detail in the post-project report.

145. Any projects authorized under RGP 63 must be initiated within 14 days of receiving authorization. If the project start time can be delayed for more than two weeks, the imminent threat of impending loss may have diminished in magnitude, as well as immediacy, and generally would not meet the definition of an "emergency."

146. California's State Water Resources Control Board issued a conditional Section 401 water quality certification for RGP 63 dated November 25, 2013.

147. The 401 Certification for RGP 63 is subject to modification or revocation upon administrative or judicial review.

148. The 401 Certification for RGP 63 is limited to emergency situations that meet the California Environmental Quality Act definition of an "emergency."

149. For actions that do not quality for enrollment under 401 Certification for RGP 63 because the situation does not meet the definition of "emergency," the discharger must contact either the State Water Board or the applicable Regional Water Board to apply for an individual water quality certification.

150. Under RGP 63, all necessary BMPs to control erosion and runoff from areas associated with the emergency actions shall be implemented.

151. Under RGP 63, restoration must include revegetation with native species. The revegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory.

152. Under RGP 63, every effort must be made to ensure any material dredged or excavated from Waters of the United States is not likely to be washed back into any Waters of the United States.

153. Under RGP 63, no discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for the repair of the public water supply intake structures or adjacent bank stabilization.

154. Under RGP 63, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water except within the existing river plain unless the primary purpose of the fill is to impound waters.

155. Under RGP 63, any structure or fill authorized shall be maintained, unless it is later determined that the structure is further contributing to other adverse conditions to public property. In such situations, corrective measures will be taken to rectify these adverse conditions, including removal and/or redesign of the original emergency corrective action, or appropriate mitigation as determined through coordination with the permittee and the appropriate Federal and State agencies.

VI. City of Poway's Habitat Conservation Plan Required by the ESA

156. Preparation and implementation of the citywide Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan (HCP) is necessary to allow for the incidental take of listed species by public projects and private projects which rely upon the City's incidental take/management authorization permit. This subarea HCP fulfills requirements pursuant to Section 10(a) of the federal Endangered Species Act (ESA), 16 U.S.C. § 1539.

157. Poway's HCP plays a number of legal roles as an environmental planning document, and the implementing agreement for the HCP, properly signed by the City of Poway and the wildlife agencies, assures that the HCP will be fully implemented.

158. Collectively, the laws and planning efforts require protection and management of sufficient, interconnected habitat areas to support listed species – or "target" species that serve as indicators of ecosystem health – in exchange for allowing limited "take" of the species or its habitat.

159. Section 1.0 of the HCP points out that Incidental take may occur during otherwise lawful endeavors, such as development allowed under the community's adopted General Plan.

160. The issuance of an ITP authorizes "take" by any entity under "direct control of the permittee." 50 CFR 13.25(d) (January 8, 2014).

161. The Poway Subarea HCP serves as a multispecies HCP as called for under Section 10(a)(1)(B) of the federal ESA. Listed species covered under the plan include: Encinitas Baccharis (*Baccharis vanessae*), Southwestern willow flycatcher (*Empidonax traillii*), California gnatcatcher (*Polioptila californica californica*), and the Least Bell's vireo (*Vireo bellii pusillus*).

162. Section 7.4 states: "Impacts to vegetation communities and wildlife habitats in the City of Poway shall require compensating mitigation, restoration, or revegetation, or a combination thereof. Compensating mitigation can consist of 1) outright purchase or dedication of lands inside the Mitigation Area as biological open space or 2) payment of in-lieu fees into a mitigation bank administered by the City of Poway or a land trust acting as an agent of the City of Poway."

163. Section 7.4 states: "The compensation strategy applies to planned public and private development projects within the City or within other jurisdictions that choose to mitigate within Poway."

164. Section 7.4 further states: "The specific mitigation strategy for a project will be based on the results of a biological resource survey technical report prepared by a qualified biologist."

165. Section 7.4.3: The following mitigation ratios shall apply to all projects resulting in removal of natural vegetation or wildlife habitat within the City of Poway and that are subject to the HCP, whether inside or outside of the Mitigation Area.

a. Any unavoidable impacts to wetland habitat will be mitigated by replacement or enhancement at a minimum ratio of 3:1 for woodland types and 2:1 for shrub-dominated

types. Mitigation ratios for disturbed wetlands will generally be mitigated in-kind at no less than 1:1 ratio as determined on a case-by-case basis.

b. Impacts to oak-dominated habitats shall require mitigation by in-kind habitat creation, restoration, or enhancement. Impacts shall require a minimum of a 3:1 replacement ratio.

c. Direct impacts to coastal sage scrub or mixed coastal sage scrub/chaparral shall be compensated at a minimum 2:1 ratio.

VII. FACTUAL ALLEGATIONS

166. The City of Poway is a municipality of the State of California and, therefore, a "person" as defined by Section 502(5) of the CWA, 33 U.S.C. 1362(5), and Section 3 of the ESA, 16 U.S. § 1532(13) and subject to both Acts' requirements.

167. The City of Poway is primarily responsible for the design, construction, management, and maintenance of the trails surrounding Lake Poway, including the dirt roads, stream crossings, and maintenance facilities in the vicinity. These operations include roads with drainage systems, catch basins, ditches, man-made channels, and storm drains.

168. The City of Poway owns (or leases) Lake Poway and the surrounding areas including the following parcels: APNs: 278-280-2300; APN: 278-290-1000; APN: 278-281-0100; APN: 7601590500; and APN: 278-210-1100.

169. The City of Poway maintains trails above Lake Poway that are on City-owned/controlled land as well as Complainant's privately owned land, including APN: 278-210-2900 and 278-210-3000.

170. The trails cross waters of the United States and State of California in at least five places, including on City-owned land and on Complainant's privately owned land (APN: 278-210-3000).

171. Trail construction and maintenance involve dredging and filling activities in waters of the United States.

172. Trail construction and maintenance involve cutting wood and living plants, including state and federally protected threatened and endangered species such as Encinitas Baccharis (*Baccharis vanessae*) and Del Mar Manzanita (*Arctostaphylos glandulosa ssp. Crassifolia*).

173. Trail maintenance also involves disturbing the habitat of threatened and endangered species including the Southwestern willow flycatcher (*Empidonax traillii*), Golden eagle (*Aquila chrysaetos canadensis*), California gnatcatcher (*Polioptila californica californica*), and the Least Bell's vireo (*Vireo bellii pusillus*).

174. The City of Poway owns and operates a MS4 and its components, including on APNs: 278-280-2300; APN: 278-290-1000; APN: 278-281-0100; APN: 7601590500; and APN: 278-210-1100.

175. The City of Poway's access road and trails cross its MS4 system in several locations above Lake Poway.

176. The City of Poway's MS4 system encompasses streams and creeks from Poway's city limits off of Highway 67 and all the way downstream into Lake Poway. The subwatershed area feeding Lake Poway only extends to Mount Woodson and the eastern city limits of Poway.

177. The MS4 owned by the City of Poway includes portions of Warren Creek and the City-owned culverts and a wooden footbridge within Warren Creek and its tributaries.

178. Poway's MS4 also includes the cross-drainage culverts along the City's unpaved roads above Lake Poway, which drain directly into Lake Poway.

179. Poway's MS4 also includes a wooden footbridge over Warren Creek that is by definition a major outfall point source where storm and non-storm water directly discharges into the surface waters of Lake Poway (Boulder Bay) and its adjacent wetlands through a single conveyance draining more than 50 acres.

180. Poway's MS4 is a collection of point sources, including outfalls, that discharge into the navigable waters of the United States. See NRDC v. CNTY. of Los Angeles, 725 F.3d 1194, 1198 n.6 (9th Cir. 2013).

181. "[S]tream crossings for roads may involve point source discharges of dredged or fill material." See 40 C.F.R. § 122.27(b)(1) (August 30, 2018).

182. The Army Corps has asserted jurisdiction over Warren Creek and Lake Poway as waters of the United States.

183. Lake Poway is considered a receiving body of water and "waters of the United States." It is a navigable body of water in the traditional sense.

184. Lake Poway and Warren Creek are within the San Dieguito watershed.

185. The City of Poway conducts and/or controls construction activities, including clearing, grading, and excavation, and other land disturbance activities at various locations around Lake Poway and other locations within the San Dieguito watershed. ("Construction activities").

186. The City of Poway conducts maintenance activities, including road maintenance (such as slope stabilization, vegetation control, and drain inlet cleaning) and road surveillance, throughout the City of Poway. The City of Poway also owns and/or operates maintenance facilities, including vehicle maintenance facilities, sand storage facilities, material and equipment storage facilities in the City of Poway. The City of Poway maintains the dirt roads and trails in and around Lake Poway, including clearing them of debris and runoff damage after storms, dredging and filling activities to repair stream crossings, and regularly trimming tree and plant growth along its trails. ("Maintenance activities.")

187. The City of Poway has several volunteers under the authority and direction of Bob Hahn, Poway's Parks Maintenance Supervisor, who help maintain the City's trails, including those on Complainant's privately owned land (APN: 278-210-2900 and 278-210-3000).

188. The City of Poway also has staff under the direction of Mike Obermiller, P.E., and the City Engineer, Steve Crosby, P.E., who both oversee construction and maintenance activities of the City's trails and access roads above Lake Poway.

189. The City of Poway's discharges consist of storm water and non-storm water runoff generated from its operations and properties, including its Construction Activities, Maintenance Activities, and Maintenance Facilities.

190. Mobile components of the City of Poway's point-source earthen culvert crossings have been discharged as effluent into its downstream MS4, through a major outfall point source, and into Lake Poway, a navigable receiving water of the state and of the United States.

191. The City of Poway's discharges of pollutants into stormwater and non-stormwater have caused and have threatened to cause pollution in waters of the United States. Pollutant sources from

the City of Poway's operations include motor vehicles, road maintenance, construction site runoff, maintenance facility runoff, dumping, spills, landscape care, vegetation removal, dredging and filling activities upstream of Lake Poway, sediment runoff coming from dirt bridges placed in streams above Lake Poway, water discharged out of a device, and road reconstruction activities in and near tributaries and other receiving waters, including Lake Poway. Pollutant categories include metals, synthetic organics, sediment, nutrients, debris, oxygen demanding substances (decaying vegetation, animal waste, and other organic matter), and other pollutants which may cause aquatic toxicity and harm to aquatic species in the receiving waters. Losing the flood control capacity of Lake Poway will inevitably lead to water pollution into the Pacific Ocean 17 miles away.

192. There are at least four locations immediately above Lake Poway in which culverts with dirt backfill have been placed in waters of the state and United States, including both seasonal and ephemeral tributaries.

193. There are at least two additional locations about a mile above Lake Poway in which the City of Poway has dredged, placed dirt backfill or some other type of crossing in Waters of the United States that connect to Lake Poway.

194. There are at least eight additional cross-draining culverts under the trails above Lake Poway draining storm water and effluent into waters of the United States, i.e. Lake Poway.

195. There are at least four unpermitted culvert with dirt-backfill crossings over Warren Creek on private property upstream of Lake Poway, all of which were washed out during the winter storms of 2017. Since then, some of these crossings have been rebuilt without the proper permits and authorizations.

196. The beneficial uses of the streams in Warren Canyon and in Lake Poway itself include municipal and domestic supply, agricultural supply, industrial service supply, industrial process supply, wildlife habitat, cold freshwater habitat, preservation of biological habitats of special significance, and non-contact water recreation. See State Water Resources Control Board, Beneficial Use Designation under the Porter-Cologne Water Quality Control Act.

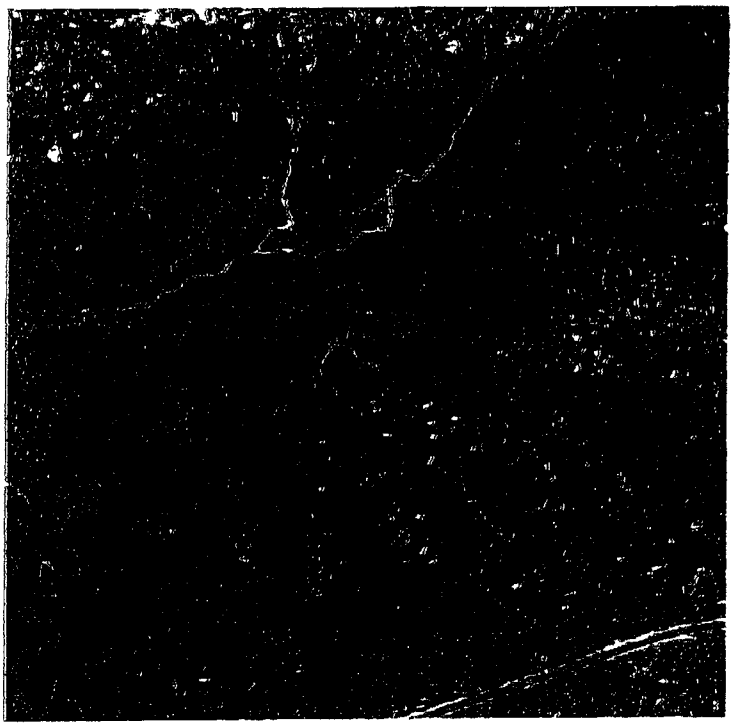
197. The City of Poway's Jurisdictional Runoff Management Plan has identified the following pollutants coming from its MS4 in Warren Canyon: Indicator Bacteria, Color, Manganese, Mercury, Nitrogen, pH, Phosphorus, Viruses, Turbidity, and Nutrients.

198. The City of Poway's discharges consist of storm water and non-storm water flows, including flows that are contaminated with pollution from point-sources and non-point sources before being discharged to the City-owned MS4.

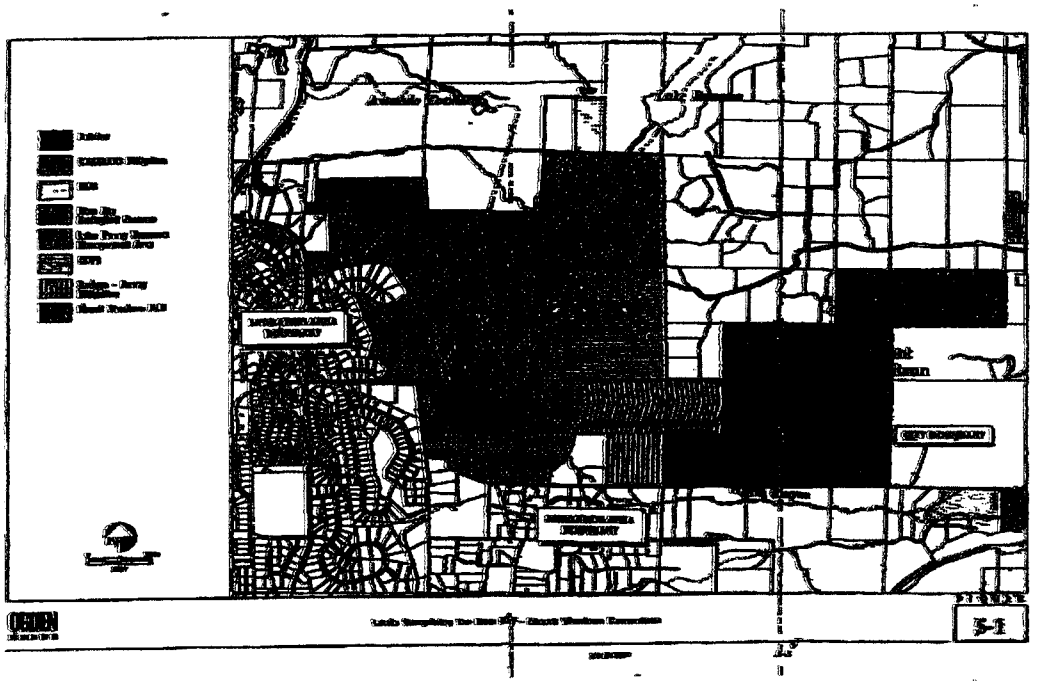
199. The non-storm water spring water and rising ground water flows are considered "discharges" for purposes of the Clean Water Act and the City's Regional MS4 Permit when the discharges first enter "into" the City-owned MS4.

200. The non-storm water spring water and rising ground ground waters are also considered discharges when those flows pass through a culvert or an outfall, or other type of point source.

201. There are two prominent sets of springs in the watershed area that feeds Lake Poway: the Kelly Spring located near the base of Mount Woodson on Complainant's private property at APN: 278-210-1800 in the City of Poway and Rock Haven Spring located near Highway 67 in the City of Poway on City-owned property (APN: 278-210-1100). The picture below, taken in 1968 after a fire, depicts the spring water flows from Mount Woodson on APN: 278-210-1800 and the spring water discharges from Rock Haven that first flow through a culvert underneath Highway 67 and into the City of Poway's MS4 before entering Complainant's private property at APN: 278-210-1800 as shown below.



202. Both the spring water discharges from Mount Woodson and from Rock Haven flow into a merged Warren Creek that eventually are deposited downstream through a major outfall (a wooden footbridge single conveyance) on City-owned APNs: 278-280-2300 and APN: 2782810100 and directly into Lake Poway, the receiving waters. The photograph below depicts Complainant's parcel APN: 278-210-1800 in yellow; the City's parcel APN: 278-210-1100 which contains Rock Haven Spring discharges is in pink; Lake Poway is colored blue; and Warren Creek as well as the stream coming off of Mount Woodson on Complainant's parcel are outlined in blue.



203. The spring water discharges from Rock Haven regularly become contaminated with pollutants from Highway 67 before being deposited into the City-owned MS4, then onto Complainant's property at APN: 278-210-1800, and then pick up more pollutants at various locations on private property in Warren Canyon before eventually emptying into City-owned property, through a major outfall point source, and into Lake Poway.

204. The spring water discharges from both Rock Haven and Mount Woodson also become polluted with contaminants from various illicit connections and unpermitted discharges and mobile pollutants at various locations on private property in Warren Canyon before eventually emptying into City-owned property and its MS4, through a major outfall, and into Lake Poway.

205. The City of Poway's unauthorized point-source earthen culvert crossings have also discharged pollutants as effluent into its MS4 and into Lake Poway, a navigable water of the state and the United States.

206. The illicit discharges into Lake Poway include non-storm spring water which becomes polluted from the illicit connections/discharges in and from the privately owned storm water conveyance system– the many unauthorized culverts with dirt-backfill stream crossings installed within Warren Creek in Warren Canyon on private property – that eventually get discharged into the City-owned portion of Warren Creek (its MS4), through a major outfall/point source, and into Lake Poway.

207. The City of Poway's discharges of pollutants into storm water and non-storm water discharges have caused and have threatened to cause pollution in waters of the United States. Pollutant sources from the City of Poway's operations include motor vehicles, road maintenance, construction site runoff, maintenance facility runoff, dumping, spills, landscape care, vegetation removal, dredging and filling, sediment runoff coming from dirt bridges placed in streams, and road reconstruction activities in and near tributaries and other receiving waters, including Lake Poway. Pollutant categories include metals, synthetic organics, sediment, nutrients, debris, oxygen demanding substances (decaying vegetation, animal waste, and other organic matter), and other pollutants which cause aquatic toxicity in the receiving waters.

1. **The City of Poway is liable for the point source storm water pollution coming from its unpaved road culvert crossings, from other illicit connections/discharges and the intentional placement of mobile pollutants in Warren Creek on private property, and from non-storm water dry weather polluted discharges into Lake Poway following the winter storms of 2017.**

208. The City of Poway owns and operates a MS4 immediately above Lake Poway. This portion of the MS4 comprises Warren Creek – a perennial stream funneling storm and spring water from Mount Woodson and Rock Haven – and its ephemeral tributaries, all of which flow into Lake Poway.

209. The City of Poway owns Rock Haven Spring on Rock Haven mountain about one-mile plus upstream from Lake Poway. The water from this spring is directly discharged into Warren Creek, the City's MS4, on City-owned property at APN: 278-210-1100 before entering private property.

210. Storm water and non-storm water from Rock Haven then flows through one-mile plus length of Warren Creek on private property, including Complainant's property at APN: 278-210-1800.

211. Complainant's property contains a separate perennial spring on Mount Woodson that flows through private property for one mile plus before entering the City's MS4 at APN: 278-280-2300 by Lake Poway.

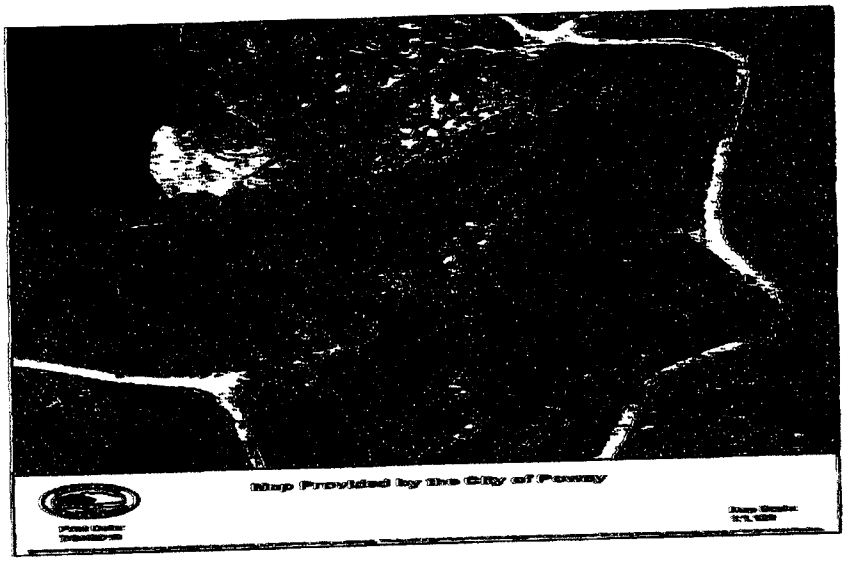
212. Illegal third-party actions on private property in Warren Canyon have resulted in illicit connections/discharges and other unpermitted materials being placed in Warren Creek. The pollutants are carried by storm and non-storm water flows downstream into the City's MS4 and into the receiving waters of Lake Poway.

213. The City of Poway has three culvert crossings composed of dredge and fill material over Warren Creek and its tributaries, as well as a wooden footbridge over Warren Creek, and the City regularly maintains them on at least a yearly basis with machinery such as tractors and other machinery, which add new fill materials to the jurisdictional waters.

214. The City of Poway-owned wooden footbridge over Warren Creek meets the legal definition of a major outfall that discharges storm and non-storm water directly into the surface waters of Lake Poway and its adjacent wetlands.

215. The City of Poway has failed to obtain any valid Clean Water Act permits for the maintenance of its culvert crossings or its footbridge over the last 25 years.

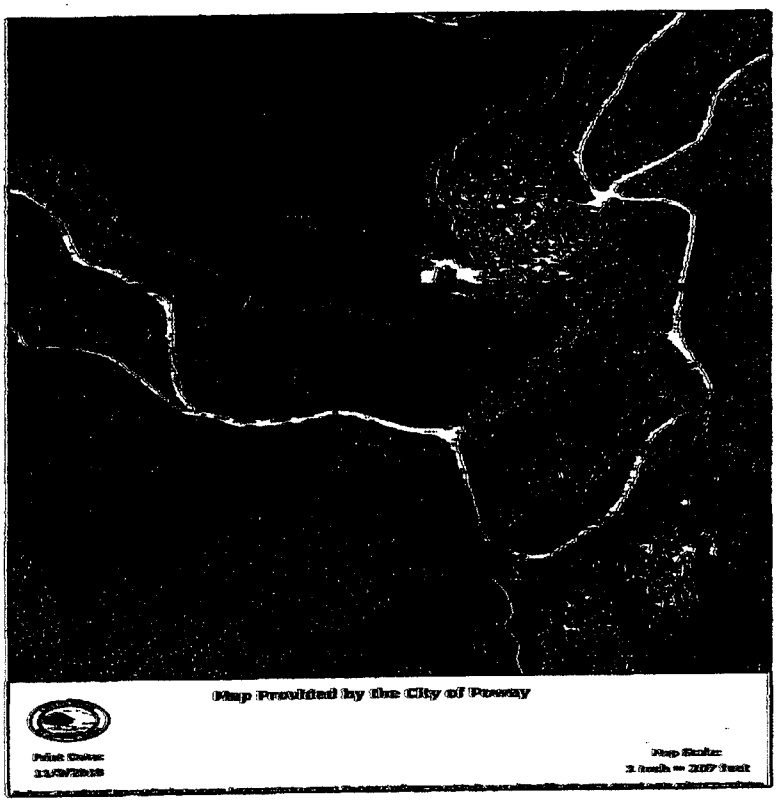
216. The photograph below depicts the hiking trails above Lake Poway in 2012 (the red arrow shows the approximate location of the main Warren Creek culvert crossing. The wooden footbridge can be seen at the end of Warren Creek in the dry portion of the lakebed of the reservoir.).



217. Beginning on January 20, 2017, the culvert crossings over Warren Creek, including those owned by private third parties and those owned by the City of Poway, began to wash away when heavy rains commenced.

218. On February 27, 2017, the largest portions of these culvert crossings were washed out when the heaviest rains produced destructive flows that damaged or destroyed at least two City-owned crossings over Warren Creek and its tributaries upstream of Lake Poway and at least four privately owned culvert crossings.

219. The photograph below, taken on March 16, 2017 and during dry weather (it hadn't rained in Poway in over two weeks), depicts the City's hiking trails above Lake Poway. Two red pins point to the approximate location of the culvert crossings within streams that were damaged or destroyed. The red pin on the right depicts the main tributary crossing within Warren Creek located at Lat. 33.003° N 117.0054° W in Section 32, Township 13 S, Range 1W, in the eastern portion of the city of Poway. There are two additional culvert crossings over ephemeral tributaries and at least eight additional cross-drainage culverts placed under the trails above Lake Poway (not identified in the picture below), all without CWA permits or state water quality certifications.

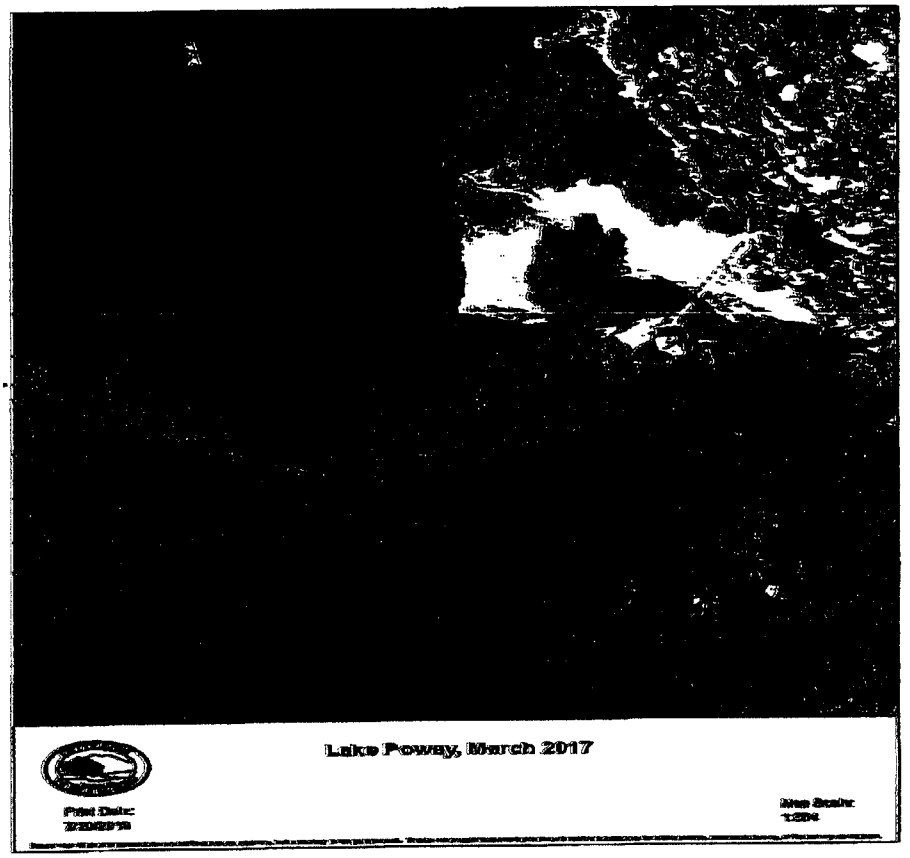


220. With the addition of pollution from the City's point sources as well as polluted discharges from private third parties, the non-storm water flowing through the City's MS4 and into Lake Poway was composed of highly concentrated amounts of sediment, debris, waste, herbicides, pesticides, metals, asbestos, and other illicit substances before the water hit major outfall and into the Boulder Bay area of Lake Poway.

221. The polluted storm water and subsequent non-storm water was discharged into Lake Poway on a daily basis from January 20, 2017 to April 17, 2017 and caused high turbidity levels in the reservoir for 87 days straight. The high turbidity levels also decreased the oxygen levels in the stream and reservoir which harmed aquatic species. The effluent also destroyed adjacent wetland habitat in the area above Boulder Bay.

222. The photograph below, taken on March 16, 2017 during dry weather (it hadn't rained in Poway in over two weeks), depicts the long-running plume of pollution migrating from Warren Creek

and into Lake Poway, the receiving body of water. The excess sediment now sits at the bottom of the reservoir. This picture depicts polluted non-storm spring water flowing into Lake Poway on March 16, 2017, carrying the City's damaged point-source dirt stream crossings as well as third-party discharges into the reservoir bottom.



223. Turbidity can be measured relative to water clarity, and the turbidity measurement of the non-storm water discharges into Lake Poway was way above 200 NTUs on March 16, 2017. This measurement is above the NAL for non-storm water discharges (20 NTUs). This measurement was taken on a dry weather day as it hadn't rained in Poway in over two weeks (the capture date of the photo above is March 16, 2017.)

224. The cloriform measurement as measured at the public water supply intake in Lake Poway was also above the permitted NAL for non-storm water during the period of January 20, 2017 and April 17, 2017, including on or around March 16, 2017.

225. The City of Poway failed to prevent the high turbidity levels in violation of its NPDES Permit, Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and R9-2015-0100, NPDES No. CAS0109266. The City of Poway should have instituted controls like a turbidity curtain to reduce the discharge of pollutants to the maximum extent practicable (MEP), but the City did nothing to prevent the long-running sediment plume from reducing the beneficial uses of Lake Poway as a water storage facility between January 20, 2017 and April 17, 2017. The lost capacity of Lake Poway remains to this day.

226. Having known that polluted storm water and non-storm water discharges have polluted Lake Poway in 2017, the City of Poway should have developed, implemented, and installed effective controls to reduce future sedimentation and other types of pollution into Lake Poway in the future.

227. The City's current "BMPs," if any, would not control future storm water pollution to the maximum extent practicable.

228. The City's current "BMPs" would not effectively reduce or effectively prohibit non-storm water discharges into Lake Poway in the future.

229. The City of Poway is required to go above and beyond the MEP standard and is required by federal law to effectively prohibit future non-storm water plumes into Lake Poway by removing its own illicit connections and discharges, remove mobile pollutants, install effective controls to reduce non-storm water discharges, and enforce the Clean Water Act regulations and state water quality requirements as to private landowners who have installed unpermitted culvert with dirt-backfill crossings and other mobile pollutants into Warren Creek within the City of Poway's jurisdiction.

230. The City of Poway must effectively segregate non-storm water discharges into its MS4 because they are causing a condition of pollution in Lake Poway and because the City's NPDES permit require that it do so regardless of pollution conditions in Lake Poway or any other receiving waterbody.

231. The City of Poway's only way around the strict standard to "effectively prohibit" polluted non-storm water discharges into Lake Poway is to require the procurement of separate NPDES permits for the non-storm water discharges from Rock Haven on City-owned property and for the non-

storm water flows that originates from Complainant's property but are passively discharged into the City's MS4 at APN: 278-290-1000.

232. On each and every day between January 20, 2017 and April 17, 2017, the City of Poway violated NPDES Permit No. CAS0109266 and the Clean Water Act, 33 U.S.C. § 1311(a) and 33 U.S.C. § 1342(p) as follows:

a. NPDES Permit No. CAS0109266, Provision A.1.a provides that "Discharges from MS4s in manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters of the state are prohibited." The City of Poway violated this provision at least 87 times during the winter and early spring months of 2017. Here, the "MS4" encompasses the portion of unpaved access road with drainage systems (culverts) above Lake Poway; the MS4 also comprises Warren Creek and its tributaries on City-owned land; the "discharges" encompass the effluent made up of the dirt, gravel, fill, and chemical and biological pollutants attached to the sediment that comprised the earthen crossings which disintegrated and were mobilized after the winter storms of 2017; the discharges encompass the polluted storm water; the discharges also encompass the polluted non-storm water spring water; the "pollution" comprises the *unreasonable* amounts of dirt, gravel, fill, and chemical and biological pollutants attached to the sediment that were transported into the wetlands adjacent to Lake Poway and into Lake Poway that resulted in the significant losses of many of the beneficial uses of the wetlands and the reservoir; the receiving waters include the downstream wetlands and Lake Poway; and the point sources encompass the springs, culverts, backfill placed within streams, the machinery used to place the backfill in the streams, and the wooden footbridge (major outfall) from which all pollutants were discharged into the surface waters of Lake Poway.

b. The storm water and non-storm water pollution reduced the beneficial uses of the wetlands by burying the vegetation, reducing the storage capacity of the reservoir, and harming aquatic life. Because the City of Poway violated the water quality standards as articulated in narrative form in Provision A.1.a, the City has violated its NPDES permit.

233. The City of Poway has also violated NPDES Permit No. CAS0109266, Provision A.1.c: "Discharges from MS4s are subject to all waste discharge prohibitions in the Basin Plan" for the reasons given above on each and every day between January 20, 2017 and April 17, 2017. The Basin Plan states: "The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited." Lake Poway is waters of the state in addition to Waters of the United States.

234. The City of Poway has also violated NPDES Permit No. CAS0109266, Provision A.2.a: "Discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving waters" for the reasons given above on each and every day between January 20, 2017 and April 17, 2017. "The receiving water limitations included in this Order consist of all applicable numeric or narrative water quality objects or criteria, for receiving waters as contained in the Basin Plan ... or in federal regulations." Narrative water quality standards include protecting particular designated uses such as for recreation or public water supply (Lake Poway serves both of these purposes). When pollutants cannot be precisely measured, narrative criteria are used to express a parameter in a qualitative form.

a. The term "pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: the waters for beneficial uses; or facilities which serve those beneficial uses.

b. "Beneficial uses" of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

235. The City of Poway has violated Provisions A.1.a, A.1.c and A.2.a of its NPDES Permit because its discharges of pollutants from its point sources and third-party point sources caused a condition of pollution in the wetlands of Warren Canyon and in Lake Poway that has resulted in the loss of the beneficial uses of these aquatic resources. The reservoir has lost some of its water storage

capacity because of Poway's pollution from its point sources – i.e. earthen stream crossings and other mobile pollutants flowing in the storm and non-storm water through its MS4. Also the beneficial uses of the wetlands immediately above Boulder Bay at the entrance into Lake Poway has been lost because of increased sedimentation that has changed the nature of the wetlands there from forested wetlands into herbaceous wetlands.

i. Sediment-laden runoff results in increased turbidity and decreased oxygen in a stream and the receiving reservoir, which in turn results in loss of in-stream habitat for fish and other aquatic species.

ii. Sediment-laden runoff can kill fish directly, destroy spawning beds, and suffocate fish eggs and bottom dwelling organisms.

iii. Sediment-laden runoff can increase difficulty in filtering drinking water, resulting in higher treatment costs, and can result in the loss of drinking water reservoir storage capacity and decrease the navigational capacity of waterways.

iv. Sediment-laden runoff blocks light and reduces growth of beneficial aquatic grasses.

236. While exiting the stream crossings, the rush of storm water and subsequent non-storm spring water traveling through the City of Poway's MS4 during winter and spring months of 2017 mobilized the stream crossing one piece of sediment at a time until the polluted storm water traveled toward Lake Poway and most of the dredge and fill material from the crossings was deposited either in the wetlands above Boulder Bay or in the lake bottom. The City of Poway is liable under the CWA because (1) the City "discharged pollutants from a point source, (2) the pollutants are fairly traceable from the point source to a navigable water such that the discharge is the functional equivalent of a discharge into the navigable water, and (3) the pollutant levels reaching navigable water are more than de minimis." Hawai'I Wildlife Fund v. County of Maui, 886 F.3d 737, 749 (9th Cir. 2018).

a. From 1972 to 2018, over 20,000 tons have entered the Boulder Bay area of Lake Poway.

b. In 2017, several of those tons of sediment filled in Boulder Bay to the point that half of its wooden footbridge at the inlet is now buried.

ATTACHMENT 4

237. The City of Poway has also violated NPDES Permit No. CAS0109266, Provision A.1.b: "Non-storm water discharges into MS4s are to be effectively prohibited, through implementation of Provision E.2, unless such discharges are authorized by a separate NPDES permit." The City of Poway has not implemented Provision E.2 to the non-storm spring water discharges into its MS4 and into Lake Poway, and the City of Poway does not have a separate NPDES permit for the non-storm water discharges from Rock Haven Spring or a NPDES permit authorizing the Mount Woodson spring water discharges into its MS4. Polluted non-storm spring water discharges into Lake Poway have been and will be a future problem because of the reoccurring, seasonal nature of the springs (i.e. typically 3 months of the year in non-drought years).

238. On February 1, 2018, the City of Poway entered into a contract with Foth-CLE Engineering Inc. to perform a bathymetric survey of Lake Poway in order to characterize the thickness of the terrestrial sediment that has deposited in the reservoir from its MS4 system following the Winter Storm Events of 2017. The City of Poway has stated in the public record that the need for this survey "became apparent" after the winter storms of 2017. City staff acknowledged that the course sediment pollution that has buried part of its wooden bridge that only a few years ago was suspended over Lake Poway. To supply City engineers with options for the removal of terrestrial sediment from Boulder Bay and other identified areas of Lake Poway, CLE compiled a dredge report. The stated goal of the project is to assess the siltation and storage capacity of Lake Poway and a review of the removal of silt from Boulder Bay and adjacent areas.

a. The report found that over 20,000 tons of course sediment has accumulated in Boulder Bay since 1972.

b. The maps complied by CLE show that the course sediment has built up over the years along the route of the historical stream (Warren Creek) within Lake Poway all the way to its spillway.

c. The report also noted that the City of Poway is trying to remove the Waters of the United States designation for Lake Poway so that it would not have to abide by the Clean Water Act

239. A permittee violates the CWA when it violates any term of its NPDES permit. See Russian River Watershed Prot. Comm. V. City of Santa Rosa, 142 F.3d 1136, 1138 (9th Cir. 1998); see also 40 C.F.R. § 122.41(a) ("Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for [an] enforcement action"); Nw. Envtl. Advocates v. City of Portland, 56 F.3d 979, 986 (9th Cir. 1995) (noting that "[t]he plain language of [the CWA citizen suit provision] authorizes citizens to enforce all permit conditions"); Environmental Law Handbook 327 ("The primary purpose of NPDES permits is to establish enforceable effluent limitations.").

240. The City of Poway has failed to fulfill Provision A.4 of its NPDES permit, which provides: "Each Copermittee must achieve compliance with A.1.a, A.1.c, and A.2.a through timely implementation of control measures. . . . Upon a determination by either the Copermittees or the San Diego Water Board that discharges from the MS4 are causing or contributing to a new exceedance of an applicable water quality standard not addressed by the Water Quality Improvement Plan, the Copermittees must submit the following updates to the Water Quality Improvement Plan . . .: Water quality improvement strategies (i.e. BMPs, retrofitting projects, stream and/or habitat rehabilitation projects, adjustments to jurisdictional runoff management programs, etc.) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards."

a. "[C]ompliance with the Provision A.4 does not shield a Copermittee who may have violated Provision A.1.a, A.1.c or A.2.a from an enforcement action" including a citizen suit. The engagement in the iterative process does not provide a safe harbor from liability for violations of permit terms prohibiting exceedances of water quality standards. The NPDES permit is designed to allow the iterative process to continue as many times as necessary to fulfill strict water quality standards.

b. The City of Poway is required to go above and beyond the iterative approach as it is required to effectively prohibit non-storm water pollution in its receiving waters through effective controls that reduce the amount of lowflow spring water into its MS4 and into Lake Poway.

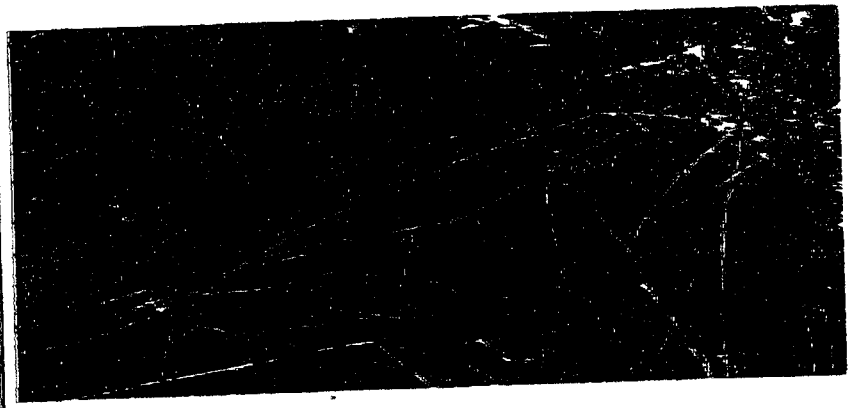
2. The City of Poway has failed to engage in best management practices in violation of its NPDES Permit by failing to maintain its cross-drainage culverts lining the unpaved road immediately above Lake Poway in 2017 to the present.

241. In addition to the culverts placed in waters of the state and Waters of the United States as discussed above, the City of Poway has at least eight cross-drain culverts along the unpaved road immediately above Lake Poway.

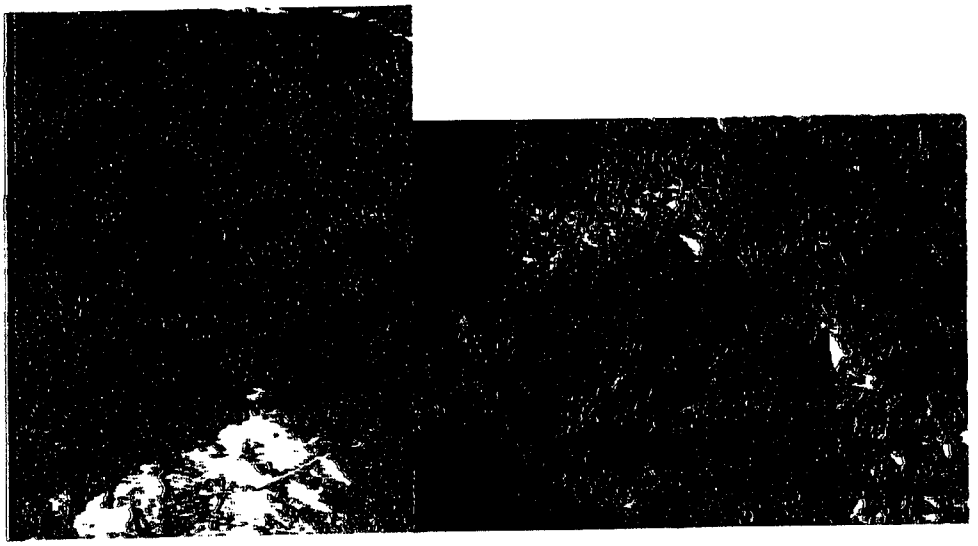
242. These cross-drain culverts discharge directly into Lake Poway.

243. These cross-drain culverts are considered a part of the City of Poway's MS4 even though they are not placed in Waters of the United States. They are considered part of the City's MS4 because they drain directly into Waters of the United States, i.e. Lake Poway thence the Pacific Ocean.

244. The City of Poway has not engaged in best management practices with regard to maintaining these cross-drain culverts. The pictures below, taken in the summer of 2018, show that the culverts are half-buried in dirt, leaves, and other debris, making the culverts ineffective in properly draining the unpaved road.



ATTACHMENT A



245. The inhibited culverts caused an unreasonable amount of pollution to drain off its dirt roads rather than through the cross-draining culverts. This pollution entered Lake Poway between January

20, 2017 and April 17, 2017, on January 9 and February 27 of 2018, and will occur again on a seasonal basis.

246. Due to the City of Poway's lack of maintenance of these cross-drain culverts, the City of Poway has violated its Jurisdictional Runoff Management Plan and its NPDES permit.

3. In 2017, the City of Poway rebuilt the destroyed earthen crossings in its MS4 right above Lake Poway in violation of sections 301, 401, 402, and 404 of the Clean Water Act.

a. Warren Creek Crossing

247. On January 24, 2017, the Poway City Council adopted Resolution No. 17-004 which declared an emergency within the City of Poway and suspended environmental review and the notice and bidding requirements in connection with emergency repairs due to significant winter storms that occurred on January 20 and February 26-27 of 2017.

248. In its July 18, 2017 Report of Emergency Repair Expenditures Pertaining to Resolution No. 17-004, the City listed $4,500 as a current expenditure on storm drain/CMP (corrugated metal pipe) repairs at Lake Poway.

249. There are at least ten locations in the vicinity of Lake Poway where storm drain CMP culverts are used to drain water into Lake Poway from various streams and tributaries coming off the nearby hills and mountains. At least two of these culverts within Waters of the State and United States were repaired in 2017.

250. On April 17, 2017, the City of Poway started a project in Warren Creek, a blue-line stream as depicted on a USGS topographic map that flows into Lake Poway, which has been designated as "waters of the United States" by the state of California and by the EPA.

251. The City described the project in its Army Corps of Engineers' Regional General Permit 63 as follows: "Place 48" tall x 72" wide x 20' long oval corrugated metal pipe (CMP) into 0.007 acre of non-wetland waters of the U.S. No excavation, pushing, shoving or contouring of the soil occurred while placing the pipe." After placement of the CMP, staff hand placed rocks and boulders with the

assistance of a back hoe and backfilled/compacted the remaining area with soil and class II base material."

a. The City described the purpose of the activity as follows: "Provide vehicular access around the lake for the maintenance of trash receptacles, trails, and other related assets, and the pumping of spoiled porta pots to eliminate the potential for human waste in proximity of drinking water. Provide emergency access for the City of Poway Fire Department in response to reports of traumatic injury, dehydration, acute medical emergencies such as heart attacks and strokes. Many of these emergencies require a rapid delivery of paramedic services and transport to a hospital for continued patient care. The activity was the minimum necessary to alleviate the immediate emergency."

b. The City described the following erosion and sediment control measures implemented: "Straw wattles and booms were placed downstream. Staff performed all work from the adjacent access control road, and no upstream and downstream material in the tributary was pushed, shoved, or contoured."

c. The City described the following pollution prevention measured implemented: "Spill containment materials were onsite; no equipment or vehicle fueling, lubrication, or maintenance were performed onsite; no equipment was placed in the tributary."

252. To the Army Corp of Engineers and to the San Diego Water Board, the City incorrectly labeled Warren Creek as "an ephemeral tributary to Lake Poway." (It is not ephemeral but a seasonal creek fed by perennial springs with flowing water at least three months out of the year typically.)

253. The City finished the project within Warren Creek on April 20, 2017.

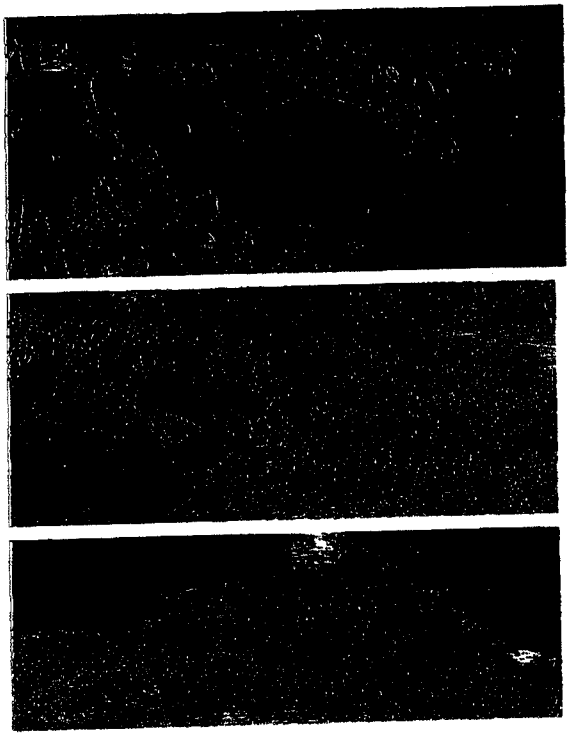
254. Although the City of Poway described the project as occurring under "emergency" conditions "emergency" conditions (as defined by state and federal law) ended by the beginning of March 2017 when the winter rains ended in the City of Poway. In fact, in hardly rained at all in March and April 2017 in the City of Poway following the heavy rains of January and February 2017.

255. Thus, the City of Poway violated the timing and situational requirements of its RGP 63 general permit because the threat of stormy weather had ended by March 1, 2017. The pictures below were taken on April 17, 2017, the day that construction of the new stream crossing began.

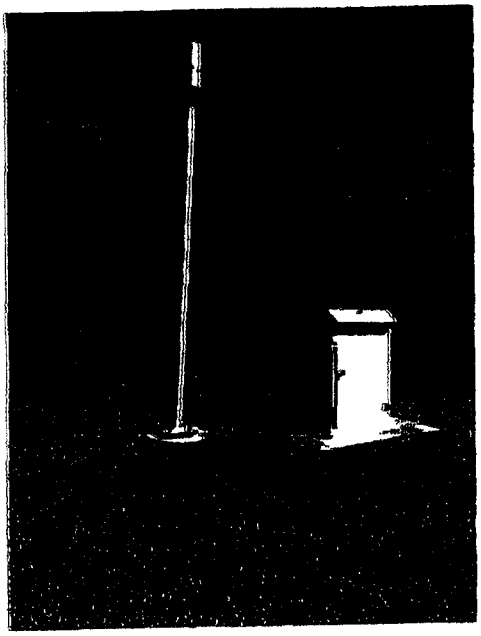
a. The pictures above show the natural spring water that emanated from Mount Woodson before being drained into Lake Poway. It hardly rained at all in Poway in March or April 2017, including around the time that the above photographs were taken, and yet spring water still flowed through Warren Creek.

b. The City of Poway submitted the pictures above and the pictures below to the Department of the Army and to the State Water Board in its "Final Report for Regional General Permit 63 for

Repair and Protection activities in Emergency Situations (RGP 63)."



256. However, the City of Poway completed unauthorized work in addition to this rebuilt culvert crossing pictured above and violated the RGP 63 condition that the work authorized be the minimum necessary to alleviate the immediate emergency. The City of Poway failed to disclose to the federal and state authorities the device placed adjacent to the crossing on a dirt-fill platform within the location of the historical stream and the pipe attached to the culvert. The pictures below were taken in April 2018 at this same location.



257. The placement of the above inlet flow meter in 2017 involve dredging within Warren Creek for the placement of the pipe attached to the culvert.

258. The RGP 63 permit states that work not described in the permit application documentation but deemed necessary after a field assessment is not authorized unless acknowledged by appropriate means. Permit modifications must also be described in sufficient detail in the post-project report. The City of Poway failed to mention the device and the pipe, its location within the historical stream, the dredging and filling activities involved in their placement, and the resulting loss of wetlands for their placement, in its post-project report.

259. The device and the attached pipe have additional adverse effects on aquatic resources including wetlands in the immediate vicinity. The City of Poway has not engaged in a mitigation project to compensate for these effects as required by its Habitat Conservation Plan.

260. Although the City of Poway obtained a generalized Section 401 Water Quality Certification by submitting its Final Report to the State Water Board, the certification that the City received violated the RGP 63 condition that situations that do not meet the definition of "emergency" require the municipality to seek out a subsequent individual water quality certification. Also the emergency water quality certification failed to mention the in flow meter and its placement within Warren Creek.

261. The City of Poway never obtained an individual water quality certification for neither its crossing nor its device/pipe and the dirt platform on which they sit in Warren Creek. The individualized Section 401 certification should have addressed the local basin plan and water quality standards as they pertain to this project and would have required the City to do much more to mitigate future environmental effects.

262. The culvert crossing, along with the inlet flow meter, are not best management practices and do not fulfill the City's NPDES requirement to control storm water and non-storm water pollution to the maximum extent practicable (MEP). Only a fully engineered bridge capable of withstanding a 50-year storm would fulfill the MEP standard.

263. The City of Poway failed to engage in all necessary BMPs to control erosion and runoff from areas associated with the aforementioned actions in violation of its CWA permits.

264. The City tried to justify its emergency permit by arguing that there were porta potties in the vicinity that needed to be empty. It is not a best management practice to have porta potties in their current location close to Warren Creek at a location that is difficult to reach after storms and close to the Lake in general. The City of Poway could have locked the porta potties, especially the one located near to Warren Creek, instead of leaving them open for hikers to use after the February 26-27, 2017 storm.

265. The City of Poway could have closed the trail at Warren Creek indefinitely until the proper repairs were done (the City does not have a problem closing its trails during heat waves and enforcing

the closure. Also, there are other ways to get to the top of Mount Woodson (using the aforementioned Warren Creek crossing is not necessary but only a more convenient way to get to the top of the mountain.) The public water supply should take precedence over recreational activities.

266. Most importantly, the City of Poway has not adhered to the requirements of RGP 63 because no discharge of dredge or fill material may occur in the proximity of a public water supply intake. The City of Poway cannot use RGP 63 or any other general permit to repair its trail crossings above Lake Poway because the crossings occur in proximity of a public water supply intake.

a. In 2017, Lake Poway had a higher numeric turbidity level than in 2016 and, unlike previous years, a higher level than allowed by state law for drinking water (0.314 NTUs).

b. These higher levels were caused by the failed culvert crossings within the City's MS4 as the pollution made its way to the City's public water supply intake area through diffusion.

c. The City must apply for an individualized permit to undertake any access road repair projects above Lake Poway because this generalized permit condition (or any of the other general permits that could have been potentially been used) can never be satisfied.

267. The City of Poway did not adhere to the RGP 63 permit condition mandating that the structure not impede the normal or expected high flows or cause the relocation of the water. A future heavy storm would destroy the earthen crossing in its "new" location and mobilize the dredged and fill material as effluent into the wetlands and reservoir below.

268. The City of Poway cannot justify placing the device and the pipe into its Warren Creek crossing under Nationwide Permit 5 because of their proximity to a public water supply intake. Also, no pre-construction notification was given to the appropriate authorities and no individual 401 water quality certification was obtained for the device or the pipe, all of which would have been required by NWP 5 or any generalized permit.

269. The City of Poway is likely to repair this stream crossing without future Department of the Army authorization.

a. The City of Poway has no intention of removing the pipe or the device. These fixtures are not for temporary scientific research.

b. The City has wrongly taken the position that Warren Creek is an ephemeral stream that is not subject to the Clean Water Act.

270. As Warren Creek is a seasonal stream with adjacent wetlands that continuously follow the creek down the short way into Lake Poway, Department of the Army jurisdiction exists for this Warren Creek crossing even under Justice Scalia's Rapanos decision.

271. This Warren Creek crossing and inlet flow meter device fall under the 2015 Clean Water Rule, which is currently applicable to California.

272. This Warren Creek crossing inlet flow meter device also fall under the EPA's pre-2015 regulations and guidelines.

273. Even if the Warren Creek crossing and inlet flow meter is judged to be outside of the jurisdiction of the Department of the Army, it should be then treated as an illicit connection/discharge because the City of Poway failed to obtain a valid state water quality certification for the entire project and non-storm water passes through the area on a seasonal basis.

b. Ephemeral tributary crossing by Piperin Corporation

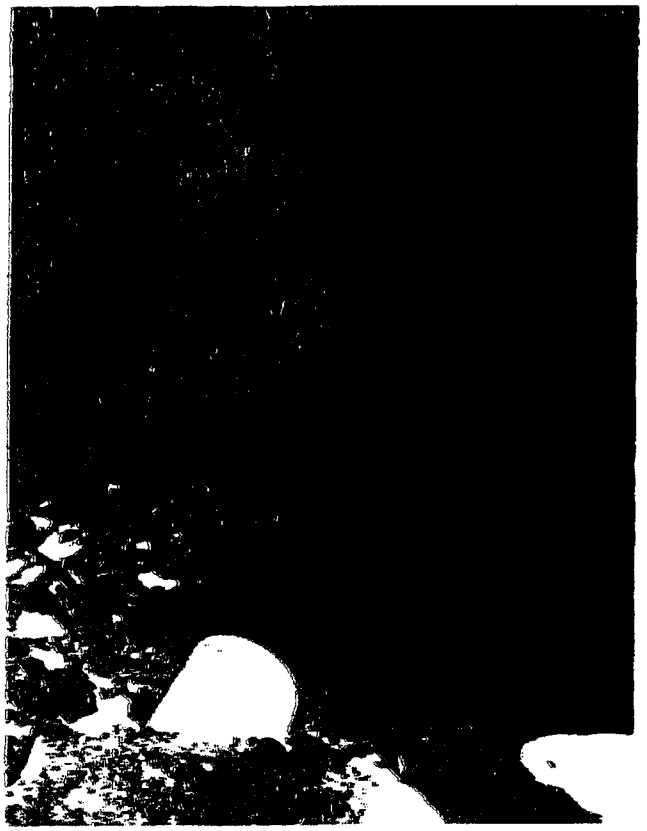
274. On July 17, 2017, the City of Poway entered into a contract for the Lake Poway Trail Slope Repair project with the Piperin Corporation.

275. This project was constructed under the January 24, 2017 Proclamation of Local Emergency, which was the City's justification for waiving environmental review and the formal bidding procedures normally associated with this type of project.

276. After the heavy rains in January and February of 2017, City staff discovered cracks in the soil slope adjacent to the Lake Poway access road. The City utilized its on-call geotechnical consultant to perform a limited geotechnical evaluation of the dirt road surrounding Lake Poway. The limited geotechnical evaluation specifically focused on an area where a large crack had formed parallel to the road. During the investigation, it was discovered that the tension crack had formed due to surficial instability of the slope at this location.

277. The project repaired the slope by replacing a section of clogged storm drain pipe and reconstructing the slope by benching the exposed slope face into competent material, and rebuilding

the slope with compacted fill. The final cost of the project was $38,976.70. The picture below depicts work done by the Piperin Corporation.



278. The Piperin project was done within an ephemeral tributary to Warren Creek that flows into Lake Poway. This ephemeral tributary is considered Waters of the United States under the 2015 Clean Water Rule, which is applicable in California.

279. The location of the project is 14556 Lake Poway Road at Latitude 33.0046, Longitude -117.0100.

280. The Piperin project was not executed in "emergency" conditions as the work was done in the dry summer months. The City of Poway abused its emergency powers by suspending environmental review and state bidding laws to repair this earthen stream crossing above Lake Poway.

281. Under state law, the Piperin Corporation would be required to pay the City back for the payment made to them for its work as the work was done in violation of state bidding laws.

282. The City of Poway and the Piperin Corporation failed to procure a valid permit for any of the storm drain/crossing repairs within the tributaries feeding Lake Poway.

283. Although the City of Poway budgeted money for permits/water quality certification for the Piperin Project, the City of Poway did not follow through in procuring these required authorizations.

284. The City of Poway cannot use a generalized permit to justify any of its culvert crossing repairs above Lake Poway because of the crossings' proximity to a public water supply intake.

285. The City cannot use a generalized Department of the Army permit for the stream crossing repaired by the Piperin Corp. because the City failed to submit pre-construction notifications to the district engineer prior to commencing the repair activity which involved discharges in a special aquatic area and which involved activity in the vicinity of endangered and threatened species protected by the ESA.

286. The City failed to engage in compensatory mitigation of additional riparian areas as required by the generalized permits, the City's Habitat Conservation Plan, and the San Diego Water Board.

287. The City of Poway is likely to repair this crossing without Department of the Army authorization and without a water quality certification in the future.

288. The City of Poway failed to implement Best Management Practices and Effective Controls for future storm water pollution as required by the City's NPDES permit because all of the work done in the Lake Poway area totaled more than one acre.

289. The CWA provides independent protection to waters within the jurisdiction of the United States, and this protection extends to critical habitat for threatened and endangered species as listed under the Endangered Species Act. The CWA, like the ESA, is structured to prohibit any harmful action unless the responsible agency concludes that certain ecological standards have been met to minimize and mitigate for that harm. 33 U.S.C. §§ 1251, 1311, 1344; e.g., 33 C.F.R. §§ 323, 325.

a. The combined ecological loss to wetlands has exceeded 0.1 acres when one accounts for the two crossings above Lake Poway in toto and the sensitive wetlands that exists near the exit point of the tributaries which all have been harmed by the sediment deposits coming from the dredged and fill material becoming effluent with the addition of storm and non-storm water.

These wetlands contain Pacific shining willows and other obligate wetland species that are home to endangered and threated species such as California gnatcatcher (*Polioptila californica californica*), and the Least Bell's vireo (*Vireo bellii pusillus*). Any valid Army Corp permit would require ESA § 7 consultation, and that consultation for the loss of wetlands was not accomplished.

b. The City of Poway failed to conserve similar habitat as compensatory mitigation for its crossings and the destructive impact that the crossings have had and will have in the future. Alternatively, the regulations require § 7 consultation to be re-initiated when the action of the City causes effects to listed species or critical habitat that were not previously considered. 50 C.F.R. § 402.16.

290. The City of Poway's unpermitted/unauthorized work in waters of the state and the United States has led to effluent being deposited in waters of the state and the United States.

291. Even if the Piperin crossing is deemed outside the jurisdiction of the Department of the Army, it would fall under the City's NPDES permit and its requirements that best management practices and other effective controls such as the use of bioengineering be used to prevent future pollution into Lake Poway.

292. If the City had obtained proper permits and had undergone the normal environmental review process, it would have showed that steps were taken to avoid impacts to wetlands, streams and other aquatic resources; that potential impacts were minimized; and that compensation will be provided for all remaining unavoidable impacts. These impacts have harmed sensitive habitat for endangered and threatened species.

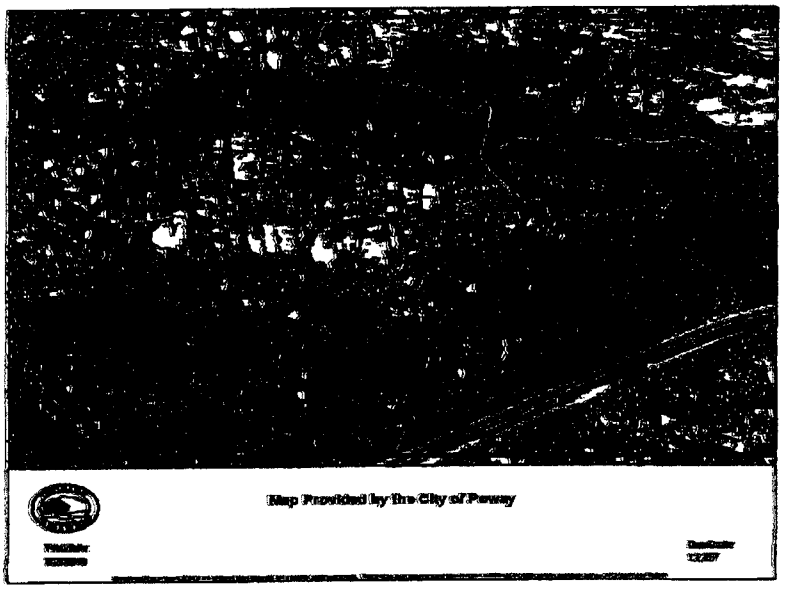
293. To fulfill its NPDES permit, the City of Poway should have installed source control BMPs that will minimize the generation of pollutants at the location of the Piperin Project because the project went beyond the classification of a "maintenance project."

4. In 2017, the City of Poway rebuilt a destroyed earthen crossings in its MS4 on APN: 278-210-1100 about a mile upstream from Lake Poway and in the same watershed in violation of sections 301, 401, 402, and 404 of the Clean Water Act.

294. The City of Poway owns APN: 278-210-1100. The parcel is zoned open-space resource management. According to the City's Habitat Conservation Plan, the parcel contains a listed species, Encinitas baccharis (*Baccharis Vanessae*). The species extends to Mount Woodson and Poway where it is associated with dense southern mixed chaparral. 61 Fed. Reg. 195 (October 7, 1996). The parcel also contains a portion of Warren Creek and Rock Haven Spring.

295. The City of Poway maintains a hiking trail on APN: 278-210-1100 called the Warren Canyon Trail. A portion of the trail meets Highway 67 in an extremely steep portion of Caltrans' right of way. The Warren Canyon Trail meanders through the lower reaches of Mount Woodson and leads to Lake Poway.

296. The Warren Canyon Trail crosses over Warren Creek on APN: 278-210-1100. The approximate location of the point of crossing is depicted by a red arrow on the photograph below:



297. After the heavy rains of 2017, the crossing was destroyed and the effluent was deposited in the wetlands of Warren Canyon and into Lake Poway below.

298. As a seasonal stream, water flows in Warren Creek on APN: 278-210-1100 continuously from January to the beginning of April during most years.

299. Rock Haven Spring is located on the parcel and on the adjacent Caltrans right of way. Water from this spring flows under Highway 67 and into the blue-line stream draining Rock Haven.

300. Complainant own the five parcels surrounding the City's open-space parcel: APNs 278-210-1800, 278-210-0300, 278-210-0400, 278-210-2900, and 278-210-3000. All of this surrounding land is zoned rural residential.

301. The City's trail crossing on APN: 278-210-1100 over Warren Creek has resulted in dredged and fill material and other mobile pollutants being intentionally placed in waters of the state and United States.

302. During the heavy storms of 2017 and for three months thereafter, effluent from the City's crossing resulted in pollution traveling onto Complainant's property at APN: 278-210-1800. This pollution harmed the wetlands located on the City's property and Complainant's property on each and every day between January 20, 2017 and April 1, 2017. This pollution violated the City's NPDES permit, Provisions A.1.a, A.1.b, A.1.c, and A.2.a for many of the same reasons as mentioned above. Some of this pollution traveled all the way into Lake Poway on those dates (approximately).

303. In the Spring of 2017, the City repaired this crossing without a proper CWA § 404 permit because the City failed to file a pre-construction notification or obtain a water quality certification for this crossing.

304. The City's actions created mobile pollutants to be placed within Warren Creek on APN: 278-210-1100.

305. Non-storm water from Rock Haven picks up pollution from Highway 67 and then flows into the City's MS4 and onto Complainant's property below.

306. The City of Poway failed to install effective controls and other best management practices to reduce storm and non-storm water pollution coming from APN: 278-210-1100, onto Complainant's property APN: 278-210-1800, and into Lake Poway below.

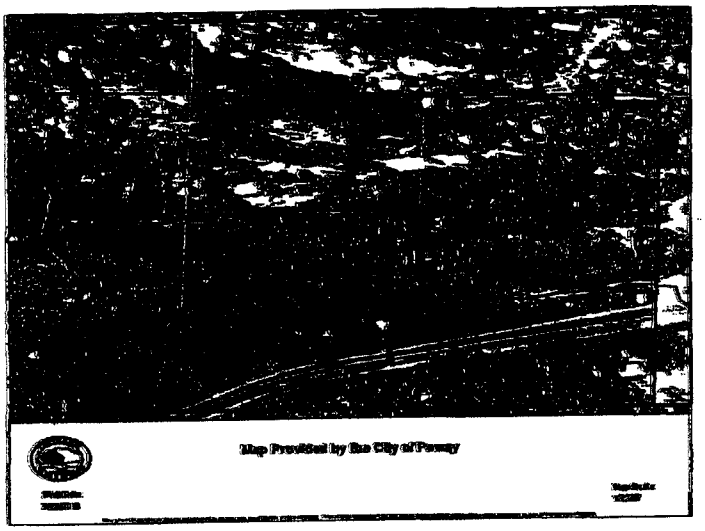
5. The City of Poway has constructed and maintained an unauthorized hiking trail on Complainant's parcels, APN: 278-210-0300, 278-210-0400, 278-210-2900, and 278-210-3000, in violation of state trespassing laws and in violation of the ESA and the CWA.

307. Complainant's four other parcels (described in two separate deeds) are also located adjacent to the City of Poway's parcel APN: 278-210-1100.

308. The property line of Complainant's parcels reaches to Poway's northern and northeastern city limit. These four parcels, like the City's parcel, are in Warren Canyon and contain a portion of Warren Creek, the blue-line stream draining Rock Haven.

309. The photograph below depicts four of Complainant's parcels (zoned rural residential). The well-maintained hiking trails as shown cross over a portion of Warren Creek. The historical stream on this parcel is considered jurisdictional waters of the United States under the 2015 Clean Water Rule.

310. The City of Poway regularly clears the stream and upland areas of wooded vegetation in violation of state trespassing laws and without a valid § 404 permit, which is needed to clear the remnants of the stream bed.



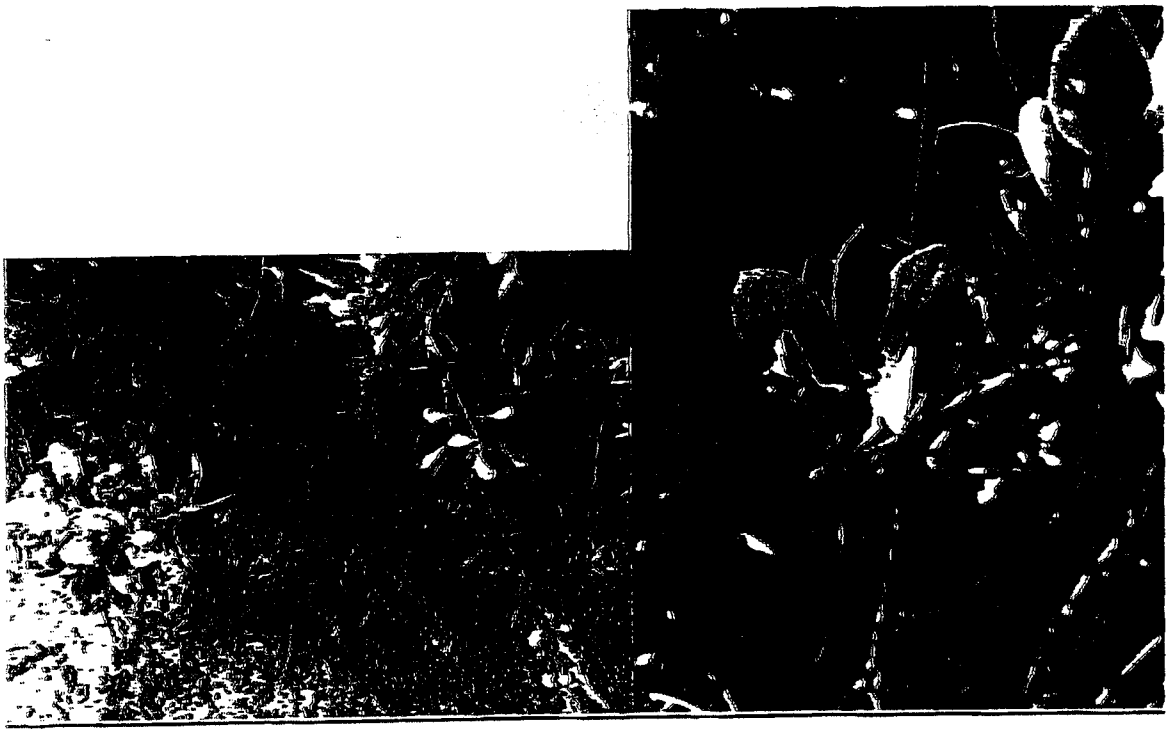
311. In the picture above, the X marks in lime green are the approximate locations of the endangered species that the City of Poway has cut or destroyed in the process of constructing and maintaining its trails on Complainant's parcels.

312. The City of Poway's discharges of pollutants by maintaining this point source stream crossing has resulted in violations of the City's NPDES permit.

313. The City of Poway failed to obtain a CWA § 401 water certification for this crossing.

314. Under Cal. Penal Code § 601 and 602, it is unlawful to cut down, destroy, or injure any kind of wood growing upon the lands of another.

315. Two federally listed threatened and endangered species have been harmed by the City of Poway: *Arctostaphylos glandulosa ssp. Crassifolia* (Del Mar or Costa Baja manzanita, pictured below) and *Baccharis vanessae* (a California endangered plant), which has been documented to grow in Poway and on Mount Woodson by the federal government at 61 Fed. Reg. 195 (October 7, 1996).



316. Because the City has violated a state criminal trespass law and other state laws, the City is liable under Section 9(a)(2) of Endangered Species Act, 16 U.S.C. § 1538(a)(2)(B), which makes it unlawful to remove, cut, dig up, or damage or destroy any endangered plant in knowing violation of

any state law or regulation or in the course of a violation of a state criminal trespass law. The "violation of any law . . . of any State" language of Section 9(a)(2)(B) federalizes the City's violation of state law.

317. The City is also in violation of 16 U.S.C. § 1538(a)(1) because Complainant's parcels contain critical habitat for the California gnatcatcher, the least bell's vireo, and the golden eagle (currently de-listed but protected by another statute), and the City's activities on Complainant's parcels have harmed these species and their habitat.

318. The City of Poway has several volunteers under the authority and direction of Bob Hahn, Poway's Parks Maintenance Supervisor, who help maintain the City's trails, including those on Complainant's parcels. Complainant has spoken with Mr. Hahn, and he has confirmed that the City maintains the trails on Complainant's property on a regular basis. Complainant observed the City's maintenance activities on Complainant's property during the first week of May of 2018.

319. Although the issuance of an Incidental Take Permit authorizes "take" by any entity under "direct control," Poway's Habitat Conservation Plan is not applicable to Complainant's parcels of land unless Complainant agrees to be a participant and abide by its terms.

320. According to the City's HCP, if a parcel contiguous to the existing Mitigation Area is found to support high quality habitat or covered species, the property owner may voluntarily request that the property be added to the Mitigation Area. According to Poway's City Planner Joseph Lim, the California Department of Fish and Wildlife had previously urged the City of Poway to purchase APNs: 278-210-0300, 278-210-0400, 278-210-2900, and 278-210-3000 because of the high habitat values and because of the hiking trails through the properties, but the City of Poway decided to pursue other projects instead of obtaining a legal right to use the trails.

321. The fire department uses the trails on Complainant's property as an auxiliary route in wildfire situations, and City maintenance crews and volunteers use Complainant's trails instead of the City's official access point further south for safety reasons. Several people park their cars on Complainant's property to access the Warren Canyon trail rather than parking on the opposite side of Highway 67 and running through the plethora of speeding cars to get to the side where the trailhead is located.

322. Even googlemaps has the trailhead for the Warren Canyon trail on Complainant's parcel, APN: 278-210-3000, because it is a better maintained and safer trail with easier access than the alternative.

323. For the most part, the City stopped maintaining its official trailhead and has used Complainant's trailhead and properties instead.

324. Caltrans has essentially built a crossing over Warren Creek on Complainant's property by culverting some of the water from the stream and diverting it further south into the Caltrans right of way.

325. The City uses Complainant's property because the alternative route is steep and dangerous, especially during the winter and spring months.

6. The City of Poway is liable for not implementing Provisions E.2.b, E.2.c, and E.2.d of its 2013 MS4 Permit in the subwatershed area above and including Lake Poway.

326. The City of Poway has not maintained an accurate map of its entire MS4 and the corresponding drainage areas within its jurisdiction including the location of Rock Haven Spring and Kelly Spring on Complainant's property.

327. The City of Poway has not mapped the major outfall immediately above Lake Poway.

328. The City of Poway is required to track, identify, and eliminate illicit discharges and connections to its MS4 from third parties in Warren Canyon because non-storm water flows through Warren Canyon. It has not done so.

329. Provision E.2.c requires each Copermittee to conduct field screening and monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4. The field screening requirement is required to be implemented through the dry weather MS4 outfall discharge monitoring required under Provisions D.2.a.(2) and D.2.b(1). The City of Poway has failed to monitor Lake Poway for non-storm water discharges including the polluted spring water from Mount Woodson and Rock Haven that flows into its MS4 and into its reservoir.

330. The City of Poway has failed to properly report its non-storm water discharges and other illicit discharges and connections to the San Diego Water Board.

331. Each Copermittee is responsible for prioritizing its efforts to eliminate non-storm water and illicit discharges or connections to its MS4 based on field screening and monitoring data, NALs, illicit discharge investigation records, and the known and suspected sources. Sources of non-storm water and illicit discharges or connections must be eliminated by enforcing the legal authority established by each Copermittee pursuant to Provision E.1. The City of Poway has not accomplished this as to the contaminated non-storm water discharges to its MS4 vis a vis Rock Haven Spring and Kelly Spring.

332. The City of Poway has been discharging non-storm water pollution onto Plaintiff's property and into Lake Poway from at least January 20, 2017 to the present day without a separate NPDES permit authorizing non-storm water polluted discharges.

333. The City of Poway must reduce or eliminate the non-storm discharges coming from Rock Haven Spring and Kelly Spring with effective controls to fulfill 2013 MS4 Permit, Provision E.2.a.(7) "Provision E.2.a.(7) has been included in the requirements for non-storm water discharges to clarify that any non-storm water discharges to the Copermittees MS4, even those identified pursuant to Provision E.2.a.(1) through E.2.a.(4), must be reduced or eliminated, unless a non-storm water discharge is identified as a discharge authorized by a separate NPDES permit." 2013 MS4 Permit, Attachment F-96.

VIII. Summary of the Remedies Sought for all of the City of Poway's Violations

7. Complainant will seek a court order declaring the City of Poway to have violated and to be in violation of its MS4 permit and Sections 301(a) and 402(p) of the Clean Water Act, 33 U.S.C. § 1311(a) and 1342(p), for discharges causing and contributing to exceedances of water quality standards in waters of the state and United States. The City of Poway is liable for at least 261 violations for its point

source pollution coming from its unpaved road culvert crossings between January 20, 2017 to April 17, 2017.

8. Complainant will seek a court order declaring the City of Poway to have violated and to be in violation of Section 301(a) of the CWA, 33 U.S.C. § 1311(a), for engaging in dredge and fill activities without a valid permit in four different locations upstream of Lake Poway.

9. A court order declaring the City of Poway to have violated and to be in violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), for engaging in dredge and fill activities without a 401 Certification pursuant to the Act in at least four locations above Lake Poway.

10. A court order permanently enjoining the City of Poway from discharging or causing the discharge of dredged or fill materials or other pollutants into any waters of the United States except in compliance with a § 404 permit and § 401 certification and its NPDES permit.

11. To effectively prohibit non-storm water pollution, the City must install a bridge instead of the culvert crossing currently installed in Warren Creek. Complainant will seek this injunctive relief.

12. To effectively prohibit non-storm water pollution, the City must actively enforce the law as to other landowners in Warren Canyon who have unpermitted culvert crossings and other unpermitted dirt fill within Warren Creek. Complainant will seek this injunctive relief.

13. As a best management practice, Complainant will seek a court order for the removal of the porta potties by Warren Creek in proximity to Lake Poway.

14. A court order declaring the City of Poway to have violated and to be in violation of its MS4 permit and Sections 301(a) and 402(p) of the CWA for discharging non-storm water to its MS4 without a separate NPDES permit from January 20, 2017 to April 17, 2017.

15. A court order adding Lake Poway to the section 303(d) of the CWA list of impaired water bodies.

16. A court order declaring that the City of Poway does not have a separate NPDES permit for the discharge of non-storm spring water from January 20, 2017 to the present day. Every day that passes without this separate NPDES permit in place is considered a separate violation of the Clean Water Act and should be penalized up to $53,000 per day.

17. A court order directing the City of Poway to undertake measures, at the City's own expense and at the direction of the Regional Board and Army Corps, to effect complete restoration of waters of the United States within Warren Creek and its tributaries, to restore the capacity of Lake Poway through sediment removal and to conduct on-site and off-site mitigation for unauthorized and/or unavoidable impacts to waters of the United States, as appropriate.

18. Complainant will seek an order for the City to undertake as many stream, channel, and/or habitat rehabilitation projects within the Watershed Management Area that can feasibly be implemented to protect and/or improve conditions in the City's MS4 and receiving waters including waters of the state from MS4 pollutants and/or stressors within the Lake Poway/Warren Canyon sub-watershed area including the projects outlined in Exhibit A.

19. A court order awarding Complainant's reasonable costs of suit, including attorney, witness, expert and consultant fees, as permitted by Section 505(d) of the Clean Water Act, 33 U.S.C. § 1365(d); Section 11(g)(4) of the Endangered Species Act, 16 U.S.C. § 1540(g)(4); and Section 2412(d) of the Equal Access to Justice Act, 28 U.S.C. § 2412(d).

IX. Notice Requirements and Conclusion

Personal privacy Ex. (b)(6) [redacted] He can be [redacted], or at [redacted] that he can work with the City of Poway and the state and federal agencies in crafting a legal solution to the matters discussed in this letter.

Sincerely,

Personal privacy Ex. (b)(6) [redacted]

Complainant

Cc: Attorney General Jeff Sessions
U.S. Department of Justice
950 Pennsylvania Avenue, N.W.
Washington, DC 20530-0001